Summer 8-15-2022

Effect of Resource Curse on Child Well-being in Resource-rich States, Specifically in Post-Soviet States

Aytakin Huseynli
Washington University in St. Louis, aytakinh@gmail.com

WASHINGTON UNIVERSITY IN ST. LOUIS

Brown School

Dissertation Examination Committee:
Michael Sherraden, Chair
Professor Bret Gustafson
Professor Trish Kohl
Professor Shanta Pandey
Professor Joe Steensma

Effect of Resource Curse on Child Well-being in Resource-rich States,
Specifically in Post-Soviet States
by
Aytakin Huseynli, MSW

A dissertation presented to
Brown School at Washington University in St. Louis
in partial fulfillment of the
requirements for the degree
of Doctor of Philosophy

August, 2022
St. Louis, Missouri

Table of Contents

List of Figures

List of Tables

<u>Acknowledgments</u>

The accomplishment of my doctoral degree is due to my professors, parents, siblings, and friends worldwide.

Foremost, I express my sincere and deepest graduate to my academic advisor and Chair Professor Michael Sherraden for his continuous support and encouragement. The support I received from Professor Sherraden is immeasurable: I am grateful that he believed in my dissertation research idea from the first day I articulated it and supported me all the way along with academic advice and generous funding to do my dissertation research in six countries. This dissertation would not have been possible without his tireless and immediate reviews, infinite generosity, and unrelenting encouragement. I can only hope to be as incredible.

I also want to especially thank my committee members. I am so fortunate that each of my committee members provided invaluable contributions to my research. Patricia Kohl introduced me to and guided me to dive into the child well-being world of thoughts and obtain the deepest knowledge in this field. Joseph Steensma challenged me to explore the depth of statistics, instructed me to question every test I used, and investigate every interpretation I made. Shanta Pandey led me to refine my ideas around my work focusing on the research methods I used and the social protection concept I debated in my dissertation. Bret Gustafson's comments and questions about contemporary issues in countries that have oil and gas resources encouraged me to dive deeper into my research. With every revision based on comments by the committee, my dissertation's quality, and feasibility lifted to the next higher level.

Dedicated to all poor children of countries that are rich with oil & gash wealth

ABSTRACT
OF THE DISSERTATION

Effect of Resource Curse on Child Well-being in Resource-rich Countries,

Specifically in the Post-Soviet States
by

Aytakin Huseynli, MSW

Doctor of Philosophy in Social Work

Washington University in St. Louis, 2022

Professor Michael Sherraden, Chair

It was November of 2019, and I had just landed in my next country, the second resource-rich country I was visiting to collect data for my dissertation. I took a taxi from the airport to go to my hotel. The radio was playing Russian pop music. As we started to drive, I was shocked to see gleaming buildings, wide roads, lights, and mega-sized construction projects, all radiating out from the airport. I knew this particular country was rich, but I did not expect this much wealth. Everything was telling me that I was in a country with immense wealth; signs of it were everywhere. While looking around I could not hide my surprise and excitement. Noticing my reaction, the taxi driver responded, "Yes, we are a very rich country, we have all the minerals and expensive natural elements from Mendeleyev's [periodic] table."

As we were driving, the news, in Russian, which I understood, came on the radio. The news anchor announced, "We continue reporting on the news that we woke up to yesterday,

which shocked the whole nation. The mother of the five girls who burned to death behind locked doors is still in the hospital and in shock. She is still not fully conscious or able to talk about details." As I heard this, I asked the driver what happened. Apparently, two able-bodied parents had come to the capital from one of the provinces of the country to seek work to support their five children. They found a place to live, but while out earning money—most probably through informal labor—they had to leave their children without supervision behind a locked door at home. The eldest of five children, all girls, was seven years old. The family did not know anyone who could be with their daughters, nor could they afford to send them to childcare or school. A fire started at the home, and the girls could not escape, so they burned to death.

As I heard this story, we continued passing by an increasing number of mega-constructions, fancy buildings, and new bridges on the way to the hotel. I remembered an old saying we had in Azerbaijan, "the beggar sons of millionaires," which referred to the millions of poor people during the first oil boom in Azerbaijan back in the early 1900s. Azerbaijan and this country I visited had similar histories, with similar outcomes. Oil wealth does not necessarily lead to shared prosperity and development.

Moreover, as I was writing this introduction in 2022, the people of this country were mourning another tragedy—the arrests of 5,000 people and the deaths of 165 civilian protesters, who were killed on January 6, 2022, by their government, while protesting harsh living conditions and recent increases in fuel and food prices. In addition to inequality, oil- and gas-rich developing nations also tend to have less democracy and more government oppression.

Why are so many people struggling and helpless in countries with oil and gas resources? As countries become richer, citizens should gain in social and economic well-being. Theoretically, countries with new wealth can create opportunities for vulnerable populations,

especially for children. But that has not been the case for low-to-middle income (LMI) countries that are rich in natural resources such as oil and gas. These countries are victims of the *resource curse*, which is regressive development that occurs despite wealth coming from the exploitation of natural resources, especially oil and gas. These countries tend to have unequal economic development, strong autocratic regimes, and severe human rights violations. Social well-being is also affected negatively by the resource curse.

The purpose of this dissertation research has been to extend resource curse theory to the study of child well-being in LMI resource-rich countries and to suggest a policy-level intervention to improve children's well-being.

Although the effect of the resource curse on the development of countries has been studied since the late 1980s, little attention has been paid to the situation of children from the perspective of the resource curse. But with resource-rich LMI numbering as many as 72—about one-quarter of all the nations on the planet—the question of truncated or diminished well-being of children in these countries is important to address. And it is also important to plan, design, test, and implement tailored interventions that can contribute to the improvement of the well-being of millions of children. Given this agenda, the following three papers have the purpose of (1) studying the situation of the well-being of children in resource-rich LMI countries worldwide, (2) focusing specifically on six post-Soviet countries, and (3) developing a policy or policies to break the resource curse, in this case focusing on one resource-rich LMI country.

The first paper presents a new conceptual model to test the link between the resource curse and child well-being, using mixed-effects linear regression and then tests the mediation effect of social protection policies by using structural equation modeling analyses. Panel data for 18 years were entered into the models and analyzed in STATA 17 and SPSS 21. The sample size

for the first paper was 137 countries, nearly all the LMI countries in the world. The results

showed that dimensions of the resource curse such as oil, poverty of people, and democracy had

a statistically significant relationship with child well-being. As oil rents (or net revenues) per

capita increased, child well-being declined; and as income per capita and democracy increased,

child well-being improved.

The second paper compares three resource-poor post-Soviet countries—Georgia,

Moldova, and Kyrgyzstan—to three resource-rich post-Soviet countries—Ukraine, Azerbaijan,

and Kazakhstan—to test the relationship between the resource curse and child well-being. Using

a mixed-methods research design, the paper examines the link between the two concepts, asking

how and why the resource curse is associated with child well-being. For the quantitative part of

the study, an analytical model like the first paper was employed to test the relationship in the six

countries between the resource curse and child well-being. In the qualitative research, 65

interviews were conducted with key informants. Thematic and content analysis methods were

used to analyze data in NVivo 21, and structural, descriptive, process, motif, emotion,

evaluation, hypothesis, values, holistic, and provisional types of coding methods were used.

The quantitative analyses found that oil and poverty affected child well-being in

resource-rich post-Soviet countries, in line with the findings of the first paper. Strong civil

society and political activism of citizens were contributing factors to the successful child well-

being reforms in resource-poor countries. But measures of democracy and effective governance

had the opposite impacts. Based on qualitative insights, the standard quantitative measures of

democracy and effective governance may be overridden by the instability of government leaders

and administrators. In short, shifting political regimes do not necessarily create institutional

stability. This may be a contribution of the research, and a useful specification of resource curse theory. The qualitative results overall were more consistent with the results in the first paper.

Overall, as expected, child well-being was not a priority for policymakers in resource-rich post-Soviet countries, compared to resource-poor post-Soviet countries. The findings of the second paper suggest that child well-being reforms may be more successful in resource-rich LMI countries when decision-makers pay attention to and invest in civil society and the political activism of citizens.

The third paper proposes an intervention to improve the well-being of children in LMI countries with oil and gas resources, using Azerbaijan as a case study. The recommendations are based on the findings of additional qualitative studies conducted in Azerbaijan from 2017 to 2020. The sample for the studies was 39 key informants, such as ministers, deputy ministers, heads, and deputy heads of the national oil foundation, academics, and civil society representatives. The paper recommends diverting a portion of wealth coming from oil and gas revenues into individual child development accounts (CDAs), which are evidence-based asset-building accounts, which can be used for purposes such as postsecondary education or starting a business. Compared to the national oil reserve fund model, CDAs have a direct impact in building assets for children and households in resource-rich LMI countries, which can in turn lead to social and economic development. The national oil reserve fund model was developed in the 1970s to enable countries with oil and gas resources to save some or all that wealth for the future, but in reality, half of the resource-rich countries using this model failed to save oil and gas wealth, due to mismanagement of the funds and endemic corruption. Saving accounts at the individual and household level, in contrast, avoid government mismanagement of funds and corruption, and CDAs are a proven policy intervention to improve child well-being. Thus,

diverting oil and gas revenues into CDAs may be a promising strategy for resource-rich LMI countries. The CDA design work for Azerbaijan could also potentially serve as a model for other resource-rich LMI countries that may choose to develop similar policies.

Chapter 1: The Resource Curse and Child Well-being: Theory and Evidence

1.1. Introduction

Hundreds of millions of children in the world face lives that are uncertain and precarious. The statistics on the hardships of children are stark. In 2019, almost 235 million children were malnourished, and 3.1 million children died from undernutrition every year (UNICEF, 2021). Overall, a total of 5.2 million children under 5 years died in 2019, mostly from preventable and treatable causes (World Health Organization, 2020c). In 2020, an estimated one billion children, 2 to 17 years old, experienced psychological, physical, and sexual abuse and neglect (World Health Organization, 2022). In 2019, 41,000 children died daily due to child maltreatment (World Health Organization, 2020a, 2020b). About 258 million children and youth were out of school in 2018 (UNESCO, 2022).

Turning to context, almost 90% of the world's 1.4 billion children live in 154 low-to-middle income (LMI) countries (UNICEF, 2017), and a remarkable 75 (about half) of these countries are resource-rich (Natural Governance Institute, 2015). Resource-rich countries for this study are defined as those countries which have substantial financial wealth coming from natural resources such as oil, gas, and minerals. These resource-rich LMI countries have more than sufficient resources to eliminate or significantly mitigate the vulnerability of children and increase their well-being (Challenger et al., 2003; UNICEF, 2012; Wigley, 2017), but they often do not do so.

To be more specific, governments in most of these countries have access to oil and gas wealth sufficient to put in place effective policies and programs to improve the well-being of every child citizen. Yet remarkably, scholars have found that in countries dependent on oil and minerals, both infant mortality and life expectancy at birth are worse than in countries, at the same income level but not dependent on oil or minerals (Karl, 2007; Sovacool, 2010; Wigley, 2017; Makhlouf et al., 2017).

Among post-Soviet countries, resource-rich countries have lagged resource-poor countries in preventing child mortality. For example, in under-5 mortality, resource-rich Azerbaijan ranked 68, Turkmenistan ranked 52, Kazakhstan 70, and Ukraine 73, whereas other post-Soviet countries that are resource-poor ranked lower (meaning less child mortality). Georgia ranked 95, Moldova 100, Kyrgyzstan 79, Armenia 112, and Belarus 161 (UNICEF, 2012). Infant mortality rates among resource-rich LMI countries between 2000 and 2005 exceeded the global norm, despite most of these countries experiencing growth in the gross domestic product (GDP) and government revenues during these years (UNICEF, 2014).

In sum, a wide range of statistics on the status of children indicates that resource-rich LMI countries lag resource-poor LMI countries in child well-being. This is counterintuitive; all else equal, more resources should lead to more funding. Why is this the overall pattern?

Overall, a large body of research has found that oil and gas abundance has *adverse* effects on the social, economic, and political development of LMI countries. Oil and gas abundance in LMI countries seems to weaken and prevent the development of effective institutions, limit economic development, strengthen autocratic regimes, and undermine human development (Auty, 1993; Collier & Goderies, 2012; Franke et al., 2009; Gylfason, 2012; Hinojosa, et al., 2012; Humphreys, 2005; Karl, 2007; Madhavy, 1970; Melhum & Torvik, 2002; Ross, 2001;

Sachs & Warners, 2001; Sigele, 2009). Many scholars have concluded that oil and gas wealth is a curse rather than a blessing for LMI countries, and it is described as a "resource curse" phenomenon. The resource curse, or paradox of plenty, is defined as the failure of citizens in resource-rich developing countries to benefit effectively from natural resource wealth (Auty, 1993; Karl, 2007; Sachs & Warners, 2001).

Recognizing this puzzling and disturbing pattern, scholars have attempted to understand why. As a quick summary, adverse social and economic effects of natural resources on democracy, rule of law, political systems, governance, agriculture, economy, GDP, accountability, and transparency have been studied extensively (Collier, 2016; Karl, 2007; Ross, 2012; Sachs, 2013, 2016; Sachs & Werner, 1995).

However, surprisingly few empirical studies have looked at the circumstances of children and discussed their well-being from the perspective of the resource curse. To begin to fill this gap in knowledge, in this paper I present a new conceptual framework linking the resource curse and child well-being, in the hope of contributing an analytical tool that might also be used by other researchers. In addition, I test the relationships of my suggested conceptual framework using available data for all LMI countries.

In this analysis, I begin with an overview and operationalization of concepts for the resource curse, social protection policies, and child well-being. Second, I review evidence regarding the effects of the resource curse on economic and social development and spillover for social protection and child well-being in resource-rich LMI countries. Third, the paper introduces a conceptual framework specifying connections among resource curse, social policies, and child well-being, followed by a discussion of theoretical constructs and relationships, with propositions that might inform further studies. In the fourth part, I employ a mixed-effects linear

3

regression model and structural equation modeling to test links among selected dimensions of the conceptual framework in a large database of countries.

1.2. Inquiry

1.2.1. Definitions

Before introducing the conceptual framework to establish a link between the resource curse and child well-being in resource-rich LMI countries, it is important to clarify three major concepts—child well-being, the resource curse, and social protection.

Child Well-being

As with most concepts, there are different definitions of the well-being of children. Scholars have periodically conducted systematic reviews to corral the major definitions, perspectives, and approaches (Ben-Arieh, 2006, 2012; Camfield et al., 2010; Cho & Yu, 2020; Fernandes et al., 2012; Goswami et al., 2016; Pollard & Lee, 2003; Szanto et al., 2016). Starting in the 1970s, studies measuring child well-being increased tremendously. Most importantly, these studies extended definitions of child well-being from survival needs to developmental needs. Another important milestone in this field was the diversification of studies from high-income to low-income countries. Although a large number of studies are still from high-income countries, studies from low-to-middle income countries now add to the knowledge base (Cho & Yu, 2020).

The studies can be categorized into three major perspectives in defining child well-being: objective, subjective, and objective–subjective. Regarding conceptual approaches to child well-being, the wide range includes rights-based, quality of life, health, ecological, developmental,

capability, needs-based, deprivation, children's own perceptions, and multidimensional poverty (Cho & Yu, 2020; Statham & Chase, 2010).

Among these, rights-based, quality of life, ecological, capability, developmental, and children's own perceptions generally adopt a positive lens. These approaches define child well-being based on child development, child rights, and present conditions, as well as future outcomes of children. This approach to child wellbeing also includes children's perception of their own well-being, their contexts, and their relationships with others.

Scholars using the positive-developmental approach—including Ben-Arieh et al., (2014), Bradshaw et al., (2007), Camfield (2010), Jones et al., (2015), Minkkinen (2013), Schues and Sutter (2013), and Tisdall (2015)—suggest measuring child well-being with both subjective (self-assessed) and objective (ascribed) perspectives. They often understand child well-being as a multifaceted concept with interrelated factors at the individual, family, community, system, and societal levels. Most importantly, they see child well-being as the realization of children's rights and the fulfillment of opportunities to develop to their fullest potential. Child well-being, according to these scholars, is having a quality life and functioning based on several domains, including the social, emotional, and physical, with a focus on mental health, physical health, safety, environmental context, economic security, intellectual development, and academic achievement. This school of thought views child well-being as more than the absence of negative (e.g., not having illness or pathology), and includes elements of life fulfillment that cannot be defined, explained, or primarily influenced by economic growth. In addition, children's relationships with others, family environment, and contexts such as history and culture are important in child well-being. These authors describe child well-being as the interplay among

children's rights, conditions to express those rights, and children's healthy development, influenced by individual factors as well as social structures.

In contrast, other approaches to child well-being are essentially negative, including needs-based, deprivation, and multidimensional poverty approaches. These perspectives focus on deficits such as physical illness, illiteracy, ignorance, poverty, and social exclusion (Pollard & Lee, 2003, Statham & Chase, 2010). Deficit approaches are used to assess shortfalls and needs of children and families, with the aim of eradicating poverty and reducing challenges to child well-being. This general approach is common. UNESCO (2014), UNCHR (2018), UNICEF, and the European Union use this approach. For example, "Multidimensional Overlapping Deprivation Analysis" (MODA) is one of the measurement strategies for assessing the livelihood of children (de Neubourg et al., 2012; UNICEF, 2012).

MODA provides a method to assess the living conditions of children from several perspectives, whereas other scales assume children's use of resources by adjusting for household share and composition. Rooted in the well-established multidimensional poverty measurement tradition, MODA defines the livelihood of children from dimensions such as nutrition, education, health, sanitation, water, protection from all kinds of violence, and monetary resources (Chzhen & Ferrone, 2018; UNICEF, 2011; Kurukulasuriya, S., & Engilbertsdóttir, S., 2012).

Overall, this is a wide scope of potential concepts for selecting a definition of child well-being. Each of the approaches offers some insights and advantages, but it is impossible to include them all in one study. In this regard, the theoretical framework in this paper uses selected dimensions from both the development and deprivation approaches to child well-being. The paper is solidly based on a rights-based perspective, taking the Convention of Rights of

Children (CRC) of the United Nations as the conceptual North Star, with dimensions of child well-being based on the CRC of 1989 (see Table 1 below).

Table 1: Child Wellbeing Dimensions in the Convention on the Rights of the Child

Category	Dimension	CRC articles
Survival	Food, nutrition	CRC Art. 24
	Water	CRC Art. 24
	Health care	CRC Art. 24
	Shelter, housing	CRC Art. 24
	Environment, pollution	CRC Art. 27
Development	Education	CRC Art. 28
	Leisure	CRC Art. 31
	Cultural activities	CRC Art. 31
	Information	CRC Art. 13, 17
Protection	Exploitation, child labor, child marriage	CRC Art. 32
	Other forms of exploitation	CRC Art. 33-36
	Cruelty, violence	CRC Art. 19, 37
	Violence at school	CRC Art. 28
	Social security	CRC Art. 16, 26, 27
Participation	Birth registration, nationality	CRC Art. 7, 8
	Information	CRC Art. 13, 17
	Freedom of expression, views, and opinions; being heard; freedom of association	CRC Art. 12-15

The Resource Curse

The resource curse describes negative development in countries that have abundant nonrenewable natural resources, such as fossil fuels and minerals (Auty, 1993; Karl, 2007; Natural Resource Governance Institute, 2015; Ross, 2012). In short, the resource curse is the negative relationship between the abundance of natural resources and underdevelopment. It defines the failure of countries that do not effectively benefit from the wealth of the natural resources located in their territory. The term was first used by Auty (1993), when he observed slow or no growth among resource-rich developing countries in comparison to resource-poor developing countries over several decades beginning in 1960. This phenomenon is sometimes called "the paradox of plenty" based on Karl's study of resource-rich Latin American and Caribbean countries displaying weak development despite resource wealth (Karl, 2004; Ross, 2012).

Countries suffering from the resource curse have poor economies, weak institutions, huge income gaps between rich and poor, high inequality, less-developed social protection systems, high child mortality, a history of civil wars, internal and external armed conflicts, institutionalized corruption, nepotism, and high levels of political patronage (Auty, 1993; Collier, 2012; Franke, 2013; Humphreys, 2005; Karl, 2007; Madhavy, 1970; Melhum, 2002; Ross, 2001; Sachs, 1995; Siegel, 2009). They are disproportionately autocratic: 70% of resource-rich countries, especially oil-rich countries, are autocratic, and 40% of autocratic counties are oil-rich (Humphrey, 2005; Karl, 2007; Ross, 2001; Siegel, 2009; Torvik, 2012). Countries that exhibit the resource curse tend to have severe human rights violations and limited freedom of speech and assembly (Humphreys, 2005; Karl, 2007). Highly dependent on natural resource sectors, they are not well developed economically, and investment in human capital is low

(Gylfason, 2012; Hijonosa, 2012). Resource curse countries demonstrate high levels of policy failures and weak governance. Although these problems occur in resource-poor countries as well, evidence affirms that the above dysfunctions are more prevalent in countries with greater natural resources (Ahmadov, 2014; Franke, 2013; Hasanov, 2013; Karimli, 2007; Karl, 2007).

Theories explaining the resource curse

Since the late 1980s, when the resource curse concept was introduced, multiple models have been used to explain it. In this context, there is a universally accepted general theory: natural resource wealth leads to the resource curse when natural resources are in countries with a history of colonization, geographically far from democratic societies, and lack open trade and open markets (Auty, 2007). These factors play a primary role in the evolution of the natural resource curse. The rents from natural resources create economic and political conditions that lead to the resource curse. Building on this general statement, the concept of the resource curse has been specified emphasizing different factors. The most common explanations are Dutch disease theory, rentier state theory, rent-seeking theory, and institutions theories.

Dutch Disease Theory

The Dutch disease theory explains changes in the economies of resource-rich countries. According to this theory, once a contract for resource extraction has been negotiated and the money begins to come in, new problems arise. The Dutch disease was named after the adverse effects of the North Sea oil boom on industrial production in the Netherlands (Humphreys et al., 2007). This phenomenon emerges when resource booms cause real exchange rates to rise and labor and capital to migrate to the booming sector, which results in higher costs and reduced competitiveness for domestically produced goods and services, effectively crowding out previously productive sectors (Karl, 2007). The term was first used in *The Economist* in 1977 to

describe the decline in the manufacturing system in the Netherlands after the discovery of the natural gas field in 1959 (Wadho, 2014). Max Corden and Peter Nearly (1982E) developed an economic model in 1982 to describe it. According to their model when countries face the Dutch disease three sectors emerge and one of them is the non-tradable sector, which includes services. The other two are tradable sectors—the booming and the lagging sectors. The booming sector is usually the extraction of natural resources such as oil, gas, copper, and diamonds. The lagging sector is usually manufacturing and agriculture.

Three static models are characterized by different assumptions about the factor mobility between sectors. The boom impacts the economy through two channels—the resource movement effect and the spending effect, which lead to direct deindustrialization, which is the movement of labor from the lagging sector to the booming sector. The second is indirect deindustrialization, which is the movement of labor from the lagging sector to the nontradable sector of the lagging sector (Hasanov, 2013), resulting in huge unemployment and the collapse of the non-resource sectors, which in turn leads to high resource dependency, which is one of the negative consequences of the resource curse.

Rentier State Theory

Mahdavy (1970) popularized the rentier state concept to describe the situation in prerevolutionary Pahlavi Iran. According to Mahdavy, governments dependent on oil rents tend to become autocratic and unaccountable to their citizens. Nowadays it is applied to all countries where rentier effects are associated with a high proportion of government revenue coming from resource rents. Beblawi and Luciani (1987) developed this concept further by applying it to the Arab states and suggesting four characteristics of rentier states: (a) a significant portion of resource revenues come from the rents of indigenous resources to external clients, (b) easy

windfall of rents does not require a productive sector, (c) a small portion of the population is involved in the generation of rents, and (e) the government is the principal recipient of the rents.

Beblawi and Luciani (1987) argued that the financial volatility of rents may create an unfavorable political dynamic that increases inefficient expenditures during boom times and away from sustainable usage over time. This inefficient and wasteful use of public spending reduces the quality of public investment and services and thus limits growth potential. Large rents also create a "prize" that is so valuable that it incentivizes parties to contest for political power for any price and maybe even violently (Beblawi & Luciani, 1987; Mahdavy, 1970).

The large size of rents is associated with rentier effects and easy access by certain powerful groups such as governments. Not all natural resources generate high rents. Compared with other natural resources such as agriculture, fisheries, forestry, hydrocarbon and mineral resources, especially oil, produce larger rents. The attractive benefits of maintaining power through resource rents can prompt governments to spend more resources to improve their chances of staying in power or of being reelected.

On the other hand, Kolstad and Wigg (2009) argued that increasing the value of staying in office could also have beneficial effects by extending the planning horizon of politicians, resulting in more productive uses of resource rents and a better path of resource extraction.

Rent-Seeking Theory

A result of a rentier state is rent-seeking behavior. Gordon Tullock (1998) originated the rent-seeking idea by shifting attention from the welfare triangle to the profit rectangle and posed the question of what self-seeking entrepreneurs (voters, bureaucrats, politicians) would have access to such as the profit rectangle from the zero-profit environment to a competitive market.

According to him, rent-seeking is the use of resources of a company, an organization, or individuals to gain economic benefits from others without reciprocating to the society via wealth creation. It happens when an entity spends money on political lobbying to increase its existing wealth without creating additional wealth (Karl, 2004), for instance when a company lobbies a government for loan subsidies, grants, or tariff protection, which do not give any benefit to the society. It instead redistributes resources from taxpayers to the enterprise. This behavior becomes problematic when rent seekers demand a larger share of the pie without enlarging the pie. It is also bad when both legal and illegal efforts are used to acquire access to or control over opportunities for earning rents (Stiglitz, 2007). Private sector actors or politicians have motivations to use the political mechanism to capture rents (Humphreys et al., 2007). Reduced economic efficiency through the poor allocation of resources, reduced wealth creation, lost government revenue, increased income inequality, and national decline are effects of rent-seeking (Krueger, 1974). In resource-dependent countries, large resource rents lead to rent-seeking behavior, which is widespread in both the public and the private sectors (Karl, 2000; World Bank, 2012). The nonrenewable and depletionary feature of oil and mineral resources leads to more rent-seeking behaviors (Pindyck, 1993).

In resource-rich countries, rent-seeking results in a waste of real resources, and elites spend time and other means on nonproductive activities to obtain power and rents (Baland & Francois 2000; Drazen, 2000; Lane & Tornell 1996; Tornell & Lane 1999; Torvik 2002). Rent-seeking activities by agents can be characterized as legal, such as lobbying, or illegal and corrupt, such as bribery or extortion. During booms, easy rents can boost demand from powerful groups for fiscal resources. Resource-rich countries that have weak legal–political institutions and multiple powerful groups suffer from the "voracity effect" (Tornell & Lane 1999). The

voracity effect is more than proportional increases in discretionary fiscal spending in response to a positive revenue shock, such as an oil revenue windfall. Central governments are usually recipients of hydrocarbon and mineral revenues. Thus, the fastest way for powerful groups to obtain easy rents is through the budgetary process. But excessive fiscal transfers to several powerful groups can lead government spending to rise by an amount exceeding the windfall revenues. When fiscal spending by governments is not productive, an adverse impact on growth can happen. Even when resource-related revenues are stable, incentives for patronage and rent-seeking still can exist. But the cyclical nature of these revenues can combine with pressure for increased spending and exacerbate the problem, fostering procyclicality in fiscal policy and associated increased public expenditure. These rent effects of natural resource abundance pose a huge challenge for public policy, institutions, and political processes (World Bank, 2012).

Widespread opportunities for rent-seeking by corporations and agreement with government officials, therefore, lead to the adverse economic and political consequences of natural resources (Soros, 2007). Countries that are careful with spending during boom times or revenue windfalls also show better resistance to patronage and rent-seeking activities. In these countries, politicians have been able to appropriately manage natural resource rents over time, which leads to sustainability. Although particular institutional and political economy characteristics make the emergence of such a societal pact more likely, other factors contribute as well, such as the learning effects associated with reaping the rewards of sound economic management resulting from the availability of countercyclical fiscal resources in bad times. Chile, which showed careful spending behaviors mostly due to strong institutions, is a good example. Transparency was in place in Chile in terms of the national government controlling and

managing copper rents. Chile also had technical rules governing the identification and spending of windfall revenues in place.

The same applies to Norway, which also has been successful in managing the fiscal policy implications of oil revenues. Davis, Ossowski, and Fedelino (2003) showed Norway's success in its mature democracy and highly functional consensus-oriented parliamentary institutions. Society in Norway has a common idea: to be careful with excessive spending and avoid volatile expenditure patterns during boom times. In other words, Norway treats natural resources as a bonus but not a primary revenue generation source for their economy. Transparent political and bureaucratic processes, stable policies, strong institutions, and long-term considerations contribute to desirable fiscal outcomes and growth.

Healthy and thriving private enterprises are also driving factors for achieving prudence and longtime horizons for managing windfall commodity rents. It is claimed that a robust and efficient industry that is provided with broad and fair opportunities to do successful business is less likely to engage in rent-seeking activities to obtain rents from resource revenues. According to the model of Baland and Francois (2000), a resource boom, depending on conditions before the boom, can either increase or decrease the number of people engaged in entrepreneurship, i.e. productive activity. In their framework, if there is a strong culture of entrepreneurship in a country when a resource discovery or boom hits, the higher the initial returns are to entrepreneurship. A strong institutional base before resource discovery or booms decreases rent-seeking by making it less lucrative. Rent-seeking in turn prevents growth and development.

Institutions Theory

The cornerstone of the political economy approach is that natural resources may deter growth by fostering rent-seeking behavior. Institutions are at the heart of this relationship. But

there are still two views on the role of institutions in the resource curse literature. The first view claims that so far the role institutions play is not clear-cut, since it seems to be an endogenous problem. The second view states that weak institutions are primarily what foster rent-seeking behavior in a natural resource abundance context. Lane and Tornell (1996) and Tornell and Lane (1999) break down the voracity effect—a particular form of rent-seeking in which powerful groups have the ability to hijack and grab natural resources to their advantage, which occurs within a poor legal–political institutional framework (altered property rights and market imperfection) and in the presence of fractionalization. Torvik (2002) and Mehlum et al. (2006) put forward an entrepreneurship diversion effect in which institutions determine the behavior of an entrepreneur.

When institutions are weak, profits from resource appropriation tend to be higher than from pure production. Hence entrepreneurs are incentivized to become resource grabbers rather than wealth producers, hampering growth. On the other hand, a low-quality institutional framework can be seen because of rent-seeking (Karl, 1997; Ross, 2001). When resource-rich countries are factionalized, competition between groups for resource appropriation damages institutions, which in turn negatively affects growth through the lens of property rights corrosion (Hodler, 2006). Other channels than property rights may also be at work, for example, corruption, as documented in Brazil (Caselli & Michaels, 2009), or rigged elections with bribed voters (Acemoglu & Robinson, 2006), and bought off political challengers (Acemoglu et al., 2004).

As discussed above, strong institutions before discovery or booms of natural resources decrease the chance for rent-seeking behaviors in resource-rich countries. The pool of windfall rents, especially when captured by governments, leads to rent-seeking and poor governance,

which can undermine the development of good institutions (Mehlum et al., 2006). The resource-curse literature, on the other hand, states that natural resources destroy institutions, which leads to failure to benefit from resources (Sachs & Warner, 1995). The institutional explanations of winners and losers in natural resource-rich countries have a long history in the political literature. The primary argument is that natural resources can harm institutions more during resource discoveries and booms that materialize when a country's institutions are already deficient and weak. They can, in turn, undermine growth and a bad equilibrium can thus develop. Having already weak institutions leads to natural resource exploitation patterns that in turn do not call for better institutions, keeping institutions deficient and undermining growth. A significant leap in institutional quality is needed in institution-weak resource-rich countries to break free to a good equilibrium wherein resource wealth, good institutions, and growth positively reinforce one another (Vardy, 2010).

Melhum et al. (2006) suggested that the quality of institutions is very decisive for the emergence of the resource curse. Institutions can be important for how natural resources affect economic growth even when resource abundance has no effect on institutions. Melhum et al. (2006) claimed that the resource curse happens in countries with inferior or weak institutions but not in countries with better institutional arrangements. They asserted that growth performance variance among resource-rich countries is mainly due to how resource rents are distributed via the institutional arrangement.

There are two categories of institutions: producer-friendly, where rent-seeking and production are complementary activities, and grabber-friendly, where rent-seeking and production compete (Melhum et al., 2006). Grabber-friendly institutions tend to specialize in unproductive influence activities because there are gains from them and the weak rule of law,

malfunctioning bureaucracy, and corruption enable them (Melhum et al., 2006). Grabber-friendly institutions can be particularly bad for growth when resource abundance moves scarce entrepreneurial resources out of production and into unproductive activities. But countries with producer-friendly institutions and abundant resources attract entrepreneurs into production, resulting in higher growth.

According to Melhum et al. (2006) success stories in resource-rich countries are due to strong institutions—for example, Botswana has had the highest growth rate since 1965 despite 40% of its GDP coming from diamonds. Acemoglu et al. (2002) related this success to good institutions in Botswana as among African countries it has the best score on the Groningen Corruption Perception Index. But countries such as Nigeria, Venezuela, and Mexico fail to benefit from their natural resources due to weak or inferior institutions, which invite grabbing behaviors. The institutions' theory states that the natural abundance hinders economic growth only in countries with grabber-friendly institutions while countries with producer-cooperative institutions are not affected by the resource curse (Melhun et al., 2006).

Based on the theories discussed above, it seems clear that natural abundance is not inherently bad, but the effects that arise from it can be harmful to growth and development. Spillovers from the resource curse negatively affect other sectors or institutions, even they are not directly related to the natural resource sector. The negative conditions emerging from the Dutch disease, the rentier state, rent-seeking, and grabber-friendly institutions give rise to the resource curse. In turn, the resource curse degrades all systems of society.

Resource-rich countries that avoided the resource curse

Resource-rich developed and developing countries differ in terms of the resource curse. The developed nations could have escaped the resource curse, due to their strong institutions,

diversified economies, and democratic governance (Auty, 2007; Ross, 2012). About eleven countries out of 82 have avoided the resource curse. Seven of them are high-income developed nations and four of them are middle-income developing nations. The countries among high-income economies which have escaped the resource curse are Norway, Australia, New Zeeland, Canada, Chile, the US, and Brazil. All these countries treated resources as a bonus, not as the backbone of the economy. They developed other industrial sectors and do not depend only on their natural resources now (Gylfason, 2008). Their development is not heavily dependent on resource rents, wealth comes from natural resources. All these nations have natural reserve funds, and they save either all or the most part of the resource rents for the future. Norway, which is considered a success story among resource-rich countries, does not spend its natural resource wealth at all and saves it in a natural reserve fund. The estimated savings of Norway was calculated as $1.19 trillion in 2022. Among LMIC countries, Chile, Botswana, Malaysia, Thailand, and Indonesia are claimed to avoid the resource curse.

Chile as an LMIC is a good example that was able to avoid the resource by using conservative policies that stressed fiscal balance and exchange rate flexibility, Chile was able to overcome the resource curse. Chile also established new institutions such as a mineral stabilization fund to secure mineral benefits while insulating the rest of the economy from the over-rapid injection of mineral revenues. Chile's success is also due to diversification of the economy rather than depending only on the natural resource sector (Auty, 1999).

High dependence on resource sectors results in rising of the resource curse. Diversifying economies, investing in non-resource sectors, and treating resource wealth as price are highly recommended by economists to avoid the resource curse (Sachs & Werner, 1995; Sachs, 2005). A strong tax system is also another important solution to avoid the resource curse. Collier (2012)

highlights the importance of a solid tax system as an important step in building sustainability in resource-rich countries.

In addition to economic measures, political measures such as high-quality institutions, strong democracies, a rule of law, and transparency are needed for the countries to eliminate the resource curse (Mehlum, 2002; Tovrik, 2012). Franke et al., (2013) in their qualitative study on post-Soviet oil countries, highlighted the importance of a strong civil society as one of the important ways to help post-Soviet states to lift the resource curse. Because, according to them, a strong civil society can play the role of check and balance and monitor the spending of the resource wealth by the governments. Transparency of resource contracts is also considered an important factor in avoiding the resource curse (Soros, 2007; Sachs, 2006; Gillies, 2006).

Measuring resource curse

Dimensions of the resource curse include endemic corruption, autocracy, weak institutions, weak governance, policy failure, poverty, resource dependency, unbalanced growth, lack of political will, and limited transparency. Data for these dimensions are collected by the World Bank, ILO, UN agencies, private and public universities, think tanks, individual scholars, and research centers. The conceptual framework suggested in this paper looks at relationships across one or all dimensions of the resource curse and measures of child well-being, in order to estimate the effects of the former on the latter.

Social Protection

Definitions of social protection are varied and fluid. Several schools of thought have emerged on defining social protection. This area arose in the 1980s, after recognition of the role of social protection in alleviating poverty and promoting growth and development. Some schools have advocated for child-centered approaches and others take a rights-based perspective.

Definitions of social protection come mostly from multilateral, bilateral, or civil society organizations and think tanks. Broadly, social protection is defined as a combination of institutions, laws, regulations, programs, and services to implement formal social support for citizens. The World Bank (2011) defined social protection as a vehicle to achieve poverty alleviation, risk reduction, resilience, and economic growth. Social protections defend people from shocks, and support them in improving their livelihoods, and building a better life for themselves and their families.

According to the World Bank, social protection systems should entail three core activities: (1) social welfare programs, including cash transfers, targeted food assistance, and subsidies; (2) contributory social insurance/security programs, such as disability pensions; and (3) labor market programs that seek to enhance skills and productivity and enable people to find jobs.

Similarly, the United Nations Research Institute for Social Development (UNRISD, 2012b) defined social protection as consisting of policies and programs to reduce poverty and vulnerability by promoting efficient labor markets, diminishing people's exposure to risks, and enhancing their capacity to manage economic and social risks, such as unemployment, exclusion, sickness, disability, and old age. And the Organization for Economic Co-operation and Development (1999) viewed social protection as action to enhance the capacity of poor people to participate in, contribute to, and benefit from the economic, social, and political life of their communities and societies.

According to the Asian Development Bank (2003), social protection is a set of policies and programs aimed at mitigating and eliminating poverty and vulnerability with effective labor markets, reducing people's exposure to risks, and equipping them to protect themselves against

hazards and interruption/loss of income. It should have five main elements: labor markets, social insurance, social assistance, micro- and area-based schemes to protect communities, and child protection (Asian Development Bank, 2003).

The definition of social protection adopted by UNICEF is a set of public and private policies and programs aimed at preventing, reducing, and eliminating economic and social vulnerabilities to poverty and deprivations. UNICEF's (2012) definition of social protection can be used to advocate for child-centered and gender-sensitive integrated social protection policies and services.

1.3. Social Protection and Child Well-being in Resource-Rich LMI Countries

Research shows that child well-being in resource-rich LMI countries is negatively affected by resource curse spillovers. Generally, child well-being is a part of overall social protection. Thus, to develop an understanding of issues of child well-being in resource-rich LMI countries, it is important to briefly summarize the social protection policies of these countries.

1.3.1. Social Protection in Resource-Rich LMI Countries

Social protection schemes in these countries are not well developed and/or are not efficient, despite an abundance of oil and gas resources. Spillovers from the resource curse—such as autocracy, corruption, nepotism, and patronage—gradually expand the resource sector and at the same time degrade social protection (Altincekic, 2012; Gylfasson, 2012; Hujo, 2012; Karl, 2007; McCullaugh, 2013). Moreover, this process occurs with regularity. These social protection schemes that are created tend to favor the wealthy, are not inclusive of poor

populations, and in some cases do not even have the infrastructure necessary to provide universal coverage, or to be accessible to most of the population (Altincekic, 2012; Karl, 2007; Jawad, 2015; McCullaugh, 2013; Rzayeva, 2013; Collier, 2010). Elites in resource-rich LMI countries tend to invest in social security aspects of social protection—such as education, health, and pension—but not in social welfare policies such as nutrition, housing, sanitation, and cash transfers (Karl, 2007; McCullaugh, 2013; United Nations Research Institute for Social Development [UNRISD], 2014a;). In sum, the resources end up supporting elites more than the general population.

More specifically, the social security aspects of social protection policies in the areas of health, education, and housing typically cover those who are employed or belong to high-income groups and exclude the unemployed, the self-employed, farmers, nomad tribes, migrants, and minorities (Altincekic, 2013; Jawad, 2015; McCullaugh, 2013). In other words, social security policies and services are not accessible by the majority of people in resource-rich LMI countries (Altincekic, 2012; Javad, 2015; Karl, 2007; McCullaugh, 2013; Rzayeva, 2013; World Bank, 2013).

The Arab states of the Arab/Persian Gulf have well-established healthcare and education systems, but they exclude the poor, the unemployed, the self-employed, agriculture workers, migrants, farmers, and some nomadic tribe members. As a result, only 30 to 40% of the Arab population have formal social protection (Altincekic, 2012; Jawad, 2015; World Bank, 2013). According to the World Bank (2020), average rates of unemployment in the Arab region reaching about 11% (the highest in the world), but benefits of social insurance reach only a minority. Key health insurance benefits cover mostly the military and political elites and are not available to those not in formal full-time employment. From Egypt to Lebanon to Saudi Arabia,

governmental and military elites, in particular, can access the best state hospitals (Karl, 2007; World Bank, 2013) but most others cannot.

Thus, the social welfare aspect of social protection in resource-rich LMI countries tends to be regressive, inefficient, and underfinanced and consists of short-term fuel, food, and utility service subsidy policies, which are not sustainable or effective in mitigating poverty (Altincekic, 2012; Jawad, 2015; World Bank, 2013). Temporary food distribution, energy subsidies (mainly petrol, diesel, and gas), and some utility compensations are popular forms of social welfare policies in the Arab region and constitute on average 10% of GDP. Oman, for example, has universal utility subsidies, and Iran and Syria provide significant energy subsidies, although these latter policies are targeted and exclusive (Jawad, 2015; World Bank, 2013).

Social protection policies of oil- and gas-rich countries of the Middle East suffer from "leakage" of resources to the nonpoor and even the wealthy (Jawad, 2010). In 2008, 75% of Morocco's diesel and petroleum subsidy assistance accrued to the top quintile, whereas only 1% reached the bottom quintile (World Bank, 2010). Vulnerable groups such as children, people with disabilities, the elderly, minorities, women, youth, veterans, and displaced and refugee people suffer from inefficient or even nonexistent policies and services, which, if actually provided, could create access to resources to meet basic needs, such as food, housing, shelter, health care, sanitation, water, education, and nutrition (Collier, 2012; Oxfam, 2012; Rzayeva, 2013; Save the Children, 2007; UNDP, 2012).

As in the Arab region, Latin American and Caribbean (LAC) countries also have high investments in social protection for more organized formal sector workers, rather than for vulnerable groups. Resource-rich countries of the LAC region also do not do very well in terms of social welfare policies. For instance, Brazil, Chile, Argentina, Columbia, which are high

spenders on social protection, averaging 11.5% of GDP, spend only 1.8% on social welfare

policies such as cash transfers, food support, other services that are targeted the vulnerable

groups, while the rest went to social security policies such as healthcare, education, and pensions

(World Bank, 2006). Moderate-spending LAC countries (averaging 3.7% of GDP), such as

Mexico, Venezuela, Peru, Costa Rica, and Paraguay, spend only 0.8% on social welfare and

2.9% on social security. In contrast, resource-poor LAC countries such as Nicaragua, Honduras,

the Dominican Republic, El Salvador, and Guatemala spend 1.6% of GDP on social welfare and

0.3% of GDP on social security, out of the total 1.9% of GDP devoted to social protection

(World Bank, 2006).

Resource-rich post-Soviet countries, such as Russia, Azerbaijan, Kazakhstan, Ukraine,

Turkmenistan, and Uzbekistan, only began to allocate substantial budgetary revenues from oil,

gas, and mineral exports in the early 2000s (Jones et al., 2010). In the early years, Russia stood

out as a high spender among post-Soviet countries, whereas Azerbaijan was the lowest spender

and also devoted less money as a percentage of GDP to social protection. Kazakhstan and

Uzbekistan fell in the middle, and Turkmenistan skewed toward the lower end of the spectrum

(McCullaugh, 2013).

1.3.2.   Child Well-being in Resource-Rich LMI Countries

As for the well-being of children, resource curse studies show the greater the dependence

of a country on natural resources, the greater the likelihood that children born there will die at

birth, have poor health care and nutrition and have inadequate education than children born in

resource-poor countries (Karl, 2007). Infant mortality rates among resource-rich developing

countries between 2000 and 2005 lagged the global norm, despite most experiencing GDP and

government revenue growth during these years (UNICEF, 2014). Karl (2007) and Sovacol (2010) also found that in countries dependent on oil and minerals, both infant mortality and life expectancy at birth were worse than in countries at similar income levels but not dependent on oil or minerals wealth.

Makhlouf et al. (2017) examined the relationship between child mortality rate and commodity (natural resource) price movement by employing panel data for 69 resource-rich LMI countries for the period 1961 to 2011, and found a positive relationship between oil rents per capita and the under-5 mortality rate. These researchers found that resource price volatility increased child mortality in highly–resource-dependent countries. Wigley (2017) extended the resource curse theory to child mortality and tested it by employing panel data of 167 developing countries for the years 1961 to 2011. He also reported a positive relationship between oil rents per capita and the under-5 mortality rate, though this relationship was not statistically significant.

Despite excellent health care and education systems for children in the Arab states of the Persian/Arab Gulf, the needs of some groups of children are not taken into consideration. For instance, few education and health care services address the special needs of children with disabilities. In addition, education and health care systems are not inclusive of children in migrant families, farmworker families, and families who have a nomadic lifestyle (UNICEF, 2017). Similarly, although education is compulsory and free in the Arab region, informal payments (bribes), which low-income families cannot afford, are common, and more so in high-income countries: children with disabilities, children from low-income families, and children of farmworkers are excluded from existing social programs and services in resource-rich Arab states (UNICEF, 2017).

Oil-and-gas-rich Arab countries also have many street children, both domestic and from North Africa, who beg for their survival (Saudi Gazette, 2015). In general, the Arab world faces a huge child marriage issue (marriages under 18 years old), which UNICEF (2018) defined as a type of violence against children, due to social and economic problems of low-income families (UNICEF, 2018). The Imam Mohammad bin Saud Islamic University in Riyadh (2015) revealed that more than 80,000 street children live in the six oil-rich Persian Gulf Arab monarchies—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE). Around 16,000 of those children are on the streets of Bahrain, Oman, and the UAE. More than 24,000 children of 18 nationalities, but mainly Yemenis, are in the streets of the kingdoms to beg, mainly in Mecca and Medina, during major national holidays such as Ramadan, when people are more primed to donate money (*Saudi Gazette*, 2015).

In some resource-rich LMI Arab countries such as Djibouti, Iraq, Kuwait, Libya, Syria, and Yemen, child malnutrition rates are high, with a rate of stunting and underweight of at least 20%, while 58% of under-5 children were stunted in Yemen in 2009 (UNCIEF, 2017). UNICEF (2019) indicated that over 10 million children in the Middle East and North Africa suffer from chronic and acute malnutrition, including 7 million stunted and 3.7 million acutely malnourished. Large-scale residential child-care institutions—which have been proven to be detrimental to child development (UNICEF, 2005b)—are the primary child well-being services for orphans and children without parental care in many resource-rich Persian/Arab Gulf States (UNICEF, 2017).

A similar comparison of the status of children between resource-rich and resource-poor LMI countries are relevant in other parts of the world as well. For example, the total number of "social orphans" (with one or both parents living but not taking care of the child due to social and economic problems) plus biological orphans in post-Soviet resource-rich countries, such as

Kazakhstan, Turkmenistan, Russia, Azerbaijan, Uzbekistan, and Ukraine, is higher than in post-Soviet resource-poor countries such as Armenia, Moldova, Belarus, Latvia, Lithuania, and Estonia due to inefficient or absence of social protection policies and services (UNICEF, 2014). The resource-poor Republic of Georgia eliminated large residential orphanages and replaced them with alternative child welfare services such as foster care, group homes, and prevention services that met global standards on childcare (UNICEF, 2017).

Children of Latin American and Caribbean resource-rich countries face similar issues. According to UNICEF (2005b) estimates, the number of children living in institutions or detention centers in Chile and Colombia was believed to be as high as 20,000 to 30,000. In Argentina, in the province of Buenos Aires alone, more than 10,000 children were institutionalized for reasons of protection. And in Bolivia, the number of institutionalized children exceeded 15,000.

Even in countries such as Indonesia, Malaysia, Thailand, and Botswana—which are sometimes characterized as having escaped the resource curse (Ross, 2012; Sovacol, 2010)—statistics presented by UNICEF (2016) reveal that the circumstances of vulnerable children in these countries are devastating. In Indonesia 12% of children are overweight and 12% are wasted. In Thailand, 11% are overweight and 7% are wasted. High numbers of children live in large-scale orphanages; large numbers live as street children; and there are few inclusive services for children with disabilities (UNICEF, 2016).

1.3.3. Conceptual Model: The Relationship between Resource Curse and Child Well-being

The conceptual model presented in this paper specifies connections between the resource curse and child well-being, in an effort to explain the effect of the former on the latter. The framework expands the current knowledge base in resource curse studies by including effects on vulnerable groups in resource-rich LMI countries. This framework may contribute to the theoretical understanding of the effect of the resource curse in LMI countries. In terms of child well-being, the framework contributes to clarifying the process of policymaking, decision making, and implementation of policies and reforms in resource-rich LMI countries, which should be useful for scholars and practitioners working towards child well-being in these countries. In addition, the framework may provide a foundation for further research on the well-being of people in oil- and gas-rich countries overall.

The proposed framework in Figure 1 is aimed at explaining the relationship between the dimensions of the resource curse and child well-being. The framework indicates how the dimensions of the resource curse affect social protection in resource-rich LMI countries and lead to child well-being outcomes. This framework is in effect a general theoretical statement, and as such does not pretend to be a full representation of reality. The purpose of theory, perhaps especially in the social sciences, is to state and then test relationships that (a) might be predictive and (b) have implications for positive action. The focus is on interventions (represented as independent variables) that may change the outcomes (represented as dependent variables). Reality is of course very complex, but in theorizing for this purpose, documenting complexity is

not necessarily an asset. We are more interested in predictive knowledge to inform potential action.

Positioning social protection system as the mediator serves a related purpose. When specified and tested, this conceptual arrangement enables empirical documentation of both direct and indirect effects that may (or may not) have implications for action, with clear effect sizes that inform meaningful judgments. The alternative possibility of using moderation instead of mediation would not result in the same clear implications for action. Indeed, it can be unclear what to "do" with moderation effects in an applied sense. In sum, the conceptual choices made in Figure 1 aim for testing key relationships in a way that can be most productive for informing constructive interventions.

The framework suggests a research agenda for scholars in this field, an opportunity to build knowledge by testing the links it entails. Other quantitative and qualitative studies have looked at the links between the resource curse and autocracy, institutions, poverty, education, child mortality, HIV/AIDs, and the state of women (Altincekic, 2012; Karl, 2007; Gylfason, 2012; Makhlouf, 2017; McCullaugh, 2013; Ross, 2002, Sachs & Werner, 1995; Soysa, 2013; Wigley, 2017). But the resource curse literature lacks studies looking at the relationship between the resource curse and child well-being dimensions. The suggested conceptual framework aims to contribute to future studies that may address existing gaps in knowledge.

Figure 1: Conceptual Model: Effect of Resource Curse on Child Well-being

Social protection system
Labor market interventions
- Employment
- Job training

Social security
- Health care
- Education

Social assistance/welfare
- Nutrition
- Housing
- Cash assistance
- Allowances
- Social services

Resource curse
Natural resource
Oil revenues
Gas revenues
Mineral revenues
Political factors
Corruption
Weak institutions
Poor governance & policy failure
Autocracy
Lack of political will and commitment
Economic factors
Resource dependency
Poverty

Child wellbeing
Food, nutrition
Water
Health care
Shelter/housing
Education
Exploitation & child labor
Violence
Cruelty
Violence at school
Social security
Birth registration & nationality
Freedom of expression
Being heard
Freedom of association
Mental Health
Spirituality
Family Environment
Good social relations
Play

1.3.4. Resource Curse and Child Well-being

Corruption

One of the major political consequences of the resource curse is corruption—abuse of public office for private gain, including bribery, trafficking, embezzlement, nepotism, and patronage (World Bank, 1997). An abundance of mineral resources is associated with more corruption (Andersen et al., 2017; Arezki & Brückner, 2011; Brollo et al., 2013; Caselli & Michaels, 2013; Leite & Weidmann, 2002; Olken & Pande, 2012; Vicente, 2010). Due to the large rent revenues, resource projects can become highly politicized, both locally and internationally. Foreign investors rely on weaker home-country governments in support of conditions and terms that are good for them (Ross, 2012). Sachs (2013) stated that mechanisms are created for the avoidance of tax, ignoring transfer pricing by home country governments. These kinds of behaviors by home country governments and the attractiveness of high rents create a platform for corruption (Sachs, 2013).

Large scale resource projects typically have a wide net of stakeholders, which may include national governments, local governments, governments of investing corporations, small and large businesses, international financial institutions, regional development banks, developmental organizations, global consumers, and local communities, all of whose interests overlap (Collier et al., 2016; Karl, 2007; Ross, 2012; Sachs, 2013, 2016). Bhattacharyya and Hodler (2010) used panel data from 1980–2004 covering 120 nations to study the relationships between resource rents and corruption. They found that resource abundance increases corruption in countries with poor democratic institutions and low levels of democracy. Leite and Weidmann (2002) found that natural resource exports (as a share of GNP) tend to increase corruption, which in turn lowers growth. Isham et al. (2005) showed that this effect is most pronounced for "point source" natural resources such as oil, minerals, and plantation crops. Aslaksen (2010) also found that oil and mineral resources correspond to increased corruption. Vicente (2009) presented evidence that oil discoveries in the late 1990s increased perceived corruption in Sao Tome and Principe.

Corruption in all forms is harmful to development, and consequences are broad, ranging from reduced economic growth, distortion of public expenses, expanded inequality, and underdeveloped human capital (Arezki, & Brückner, 2011; Enste & Heldman, 2017; Farooq et al., 2013; Rock & Bonnett, 2004; Samimi & Abedini, 2012). Recently, the global community recognized the importance of corruption in development, and the UN targeted it in its Sustainable Development Goals. In their literature review, Enste and Heldman (2017) revealed that corruption is detrimental to total investment, capital flows, foreign aid, foreign trade, GDP, inequality, government expenditures, and social services and contributes to the shadow economy and crime.

As to social protection, although allocation from central budgets in resource-rich LMIC countries is high in corrupt countries, only a very small portion of it reaches beneficiaries. In Uganda, only 30% of expenditures per pupil reached schools between 1991 and 1995 (Delavallade, 2006). Large-scale research has found a negative relationship between corruption and education (de la Croix & Delavallade, 2008; Eicher et al., 2008; Glaeser et al., 2004; Mauro, 1997) and specifically in resource-rich countries (Cerami, 2009; Gylfason, 2001; Gylfason et al., 1999; Ruiz & García-Peñalosa, 2008). Spending on social protection is lower compared to other sectors in countries with high levels of corruption as corrupt public agents prefer investment projects with the highest bribes and less efficiency (Shleifer & Vishny, 1993). A high level of corruption distorts expenditure structures: in high-corruption countries spending on social outcomes is less but more on military spending (Gupta et al., 2001), and corrupt civil servants favor building infrastructure but not operating and maintaining it (Davoodi & Tanzi, 1997). Thus, corruption has a negative impact on social outcomes and alters the quality of social policies and services (Delavallade, 2006). This paper posits that corruption in resource-rich LMI countries has a negative effect on child well-being. Thus, the following propositions are suggested:

Proposition 1a: Corruption affects child well-being outcomes by influencing social protection systems in resource-rich LMI countries.

Proposition 1b: Corruption is detrimental to social protection systems, which leads to negative child well-being outcomes in resource-rich LMI countries.

Proposition 1c: Corruption affects child well-being in resource-rich LMI countries.

Weak Institutions

The resource curse also degrades the quality of existing institutions or hinders their development, which weakens the check-and-balance function of institutions of civil society and the justice system. This paper supports the debate over institutions in resource-rich LMI countries as an exogenous problem (Melhum, et al. 2006) and sees the deterioration of institutions as a result of the resource curse (Karl, 2007; Ross, 2012). The resource curse weakens institutions in resource-rich LMI countries through the easy appropriation of resource rents by ruling regimes (Melhum et al., 2006). Ross (2001) reported that in the Philippines, Indonesia, and Malaysia, a hardwood timber price boom created rents that compelled political elites to alter the institutions to acquire greater control over resource rents: as a result, political power became more concentrated, and corruption increased. Boschini et al. (2007) stated that strong and sufficient institutional quality can turn a resource curse into sociopolitical and economic blessings.

Poor quality of institutions is linked with slow growth rates in resource-rich LMI countries (Mehlum et al. 2006; Sala-i-Martin & Subramanian, 2008). Collier and Gunning (1999) found that weak institutions and inadequate environmental management practices accounted for slow economic growth. The role of institutions in the development of countries has been debated since the 1980s, and scholars have argued that indeed strong and well-established institutions played a big role in the progress and growth of developed East Asian countries (Ascher, 2012; Huang & Xu, 1999; Kumssa & Rodrik, 1997; Mbeche, 2004). In contrast, weak and ill-functioning institutions in most African countries have diminished development and widened gender inequality. Development declined in Tanzania, Kenya, and Uganda after the late 1970s

and 1980s when power was concentrated in hands of presidents who destroyed some institutions (Kumssa & Mbeche, 2004).

Aidis et al. (2008) found that weak institutions influenced the underdevelopment of entrepreneurship, low levels of startup, and business ownership, in Russia. Rodrik et al. (2002) found out that institutions are more important than geography and international trade in explaining cross-country income comparisons. Campos and Nugent (1999) found a positive relationship between the quality of institutions and income per capita, infant mortality, and the adult literacy rate in Latin America and African countries. This paper assumes that weak institutions in resource-rich LMI countries have a similar negative influence on child well-being.

Proposition 2a: The quality of institutions is associated with child well-being outcomes in resource-rich LMI countries by affecting the quality of social protection systems.

Proposition 2b: Weak institutions have negative effects on child well-being outcomes in resource-rich LMI countries by diminishing the quality of social protection systems.

Proposition 2c: Weak institutions affect child well-being in resource-rich LMI countries.

Poor Governance and Policy Failure

Another political outcome of the resource curse is that oil and gas resources tend to be in countries that did not have well-functioning government systems and transparency prior to the discovery and exploitation of natural resources (Sachs, 2013). Although cases of bad governance are not confined to mineral sectors or mineral-rich countries, the general consequence is that good governance is rare among developing countries, particularly those that are highly dependent on resource exports (Karl, 2004). Karl (2007) found that existing factors (e.g., institutional weaknesses, authoritarian regimes) underlie this pattern, and their adverse effects are exacerbated when resource rents feed national budgets. Studies of African economies have

found that resource-dependent economies in which the rulers enjoy discretionary power over mineral revenues without parliamentary control more likely had worse governance (Jensen & Wantchekon 2004). In addition, countries dependent on resource exports seem particularly susceptible to policy failure (Karl, 2007).

Governance type relates to how growth translates into improved living conditions. Good governance can improve health outcomes in LMI countries (Andrews et al., 2010; Lewis & Pettersson, 2009; Marmot et al., 2008; Savedoff, 2011) by improving life expectancy at birth, child and maternal mortality, healthy life expectancy, and self-reported health status (Holmberg & Rothstein, 2011), and by the successful introduction of the hepatitis B and/or Haemophilus influenza Type B vaccines (Glatman-Freedman et al., 2010). Sound governance was also associated with fewer deaths during famines in 102 countries across 28 years (Burchi, 2011). Based on the research on the relationship between the quality of governance, I suggest the following propositions:

Proposition 3a: Poor governance affects child well-being in resource-rich LMI countries through influencing social protection.

Proposition 3b: Poor governance is associated with negative child well-being outcomes in resource-rich LMI countries by weakening social protection systems.

Proposition 3c: Poor governance affects child well-being in resource-rich LMI countries.

Autocracy

Over 70% of all hydrocarbon-rich countries are autocracies, and nearly 40% of autocracies are resource-rich (Siegle, 2009). The rulers of these countries have full access to resources, which gives them much greater incentives to stay in power than the rulers of resource-poor countries. When they use all means to stay in power for a longer period, autocracy results.

Where institutions afford current leaders' wide control over resource revenues, leaders in power choose to neglect citizens' demands and use resource revenue in ways that block political opposition and strengthen authoritarian rule (Wiens et al., 2014).

Evidence shows that autocracy has a negative effect on survival outcome for children. Studying African countries, Kudamatsu (2012) found a positive relationship between democratic reforms and reduced child mortality. Using panel data to calculate annual indicators for health and political reforms in Asian, African, and Latin American countries from 1960 to 2010, Pieters et al. (2016) revealed that child mortality declined over time due to democratic reforms in 33 countries and this change stayed stable. They also found autocracies have 35% higher child mortality rates than democracies. Between 2000 and 2005 autocracies experienced a median decline in infant deaths of 2.3% compared to a decline in infant deaths of 5.7% and 13.6% for mixed regimes and democracies (UNRISD, 2014a). Based on the research on relationship between autocracy and development, I propose that autocracy is associated with child well-being in resource-rich LMI countries.

Proposition 4a: Autocracy affects child well-being in resource-rich LMI countries by influencing social protection systems.

Proposition 4b: Autocracy is associated with child well-being in resource-rich LMI countries.

Lack of Political Will and Commitment to People

Another political outcome of the resource curse is the lack of political will and commitment by states to people in resource-rich LMI countries. Two approaches, economic and institutional in the resource curse literature can be used to explain the lack of political will and commitment to people. According to an economic approach, due to the major focus on resource

sectors, other sectors of the economy are impaired, which leads to high unemployment rates across the economy. Unemployed citizens are not able to pay taxes; instead, resource sectors are the primary source of government revenues (Ross, 2001). The dysfunctionality of other sectors causes or allows resource-rich LMI countries to become heavily dependent on resource rents, which is the gap between the economic value of a resource and the cost of extracting it (Siegle, 2009). In other words, they become resource dependent. In resource-dependent countries, resource rents play a dominant role in the economy. Resource rents and taxes from resource industries become the two main revenue sources for national budgets, and governments use these budgets for public expenditures instead of drawing on taxes paid by citizens. Due to the easy windfall of resource rents coming from outside the country, governments become autocratic and unaccountable to citizens. Citizens also have little or no power to monitor government decisions on spending or policies (Beblawi & Luciani, 1987; Melhum et al., 2006). The institutional aspect of the resource curse is that due to monarchic or autocratic governance and the absence of strong institutions (rule of law, democracy, civil society, courts), power is concentrated in hands of unified or hybrid political and economic elites or the hands of families. They rig or cancel elections to stay in power, tend to ignore citizens, do not prioritize citizens in the redistribution of resource wealth (Beblawi & Luciani, 1987), and become less motivated to embark on developmental projects to bring economic benefit to the country (Ross, 2001). In addition, elites in government do not have the will or commitment to provide economic benefits to citizens.

Scholars have claimed that political will and commitment are key factors in implementing policies and programs (Greenberg & Partskhaladze, 2014; McCourt, 2003; Murunga et al., 2012). Political will was a main factor in achieving success in closing large-scale residential childcare institutions in the Republic of Georgia (Greenberg & Partskhaladze, 2014).

37

Research from Malawi, Rwanda, and Ethiopia indicated that political will and government commitment were behind the successful reform in family planning policies in these countries (Murunga et al., 2012). Considering the research on the importance of political will and commitment to reforms to achieve planned developmental outcomes, I propose that the lack of political will and commitment to reform social protection systems and invest in the family- and child-focused policies and services in resource-rich LMI countries negatively affects child well-being.

Proposition 5a: Political will and commitment affect child well-being in resource-rich LMI countries.

Proposition 5b: Lack of political will and commitment are negatively associated with worse child well-being in resource-rich LMI countries.

Poverty and Impoverished Populations

The major economic consequences of the resource curse are high poverty, malnutrition, child mortality rates; poor health care; and reduced expenditures on education (Karl, 2004; Torvik, 2002; Wadho, 2014). Studies on the resource curse and economic growth found that natural resource abundance may result in slower economic growth (Satti et al., 2014) and can be detrimental to macroeconomic factors (Ahmed et al., 2016) and that resource-rich LMI countries experience slower economic growth and have worse GDP compared to resource-poor countries (Sachs & Warner, 1997).

Gylfason (2008) compared 22 mineral-rich countries with nonmineral countries and found that mineral-rich countries had 0.1% per capita GDP growth per year between 1960–2000, whereas mineral-poor countries scored 1.4% per capita growth. He concluded that mineral-rich countries had less investment in education and health care and less-empowered women

compared to nonmineral countries. Karl (2007) stated that policies in resource-rich LMI countries end up being influenced by politically connected interest groups at the expense of entrepreneurialism, which subsequently turns policymakers away from social spending and leads to misery.

Poverty and low income causally relate to worse child development outcomes, particularly cognitive development, and educational achievements through material hardship, family stress, parental and cognitive inputs, and developmental environments that children are exposed to (Chaudry & Wimer, 2016). Using data from the Fragile Family and Child Well-being Study, a survey of primarily unmarried, low-income mothers who live in 20 large cities across the United States, Osborne and Knab (2007) found that family income and mothers' employment were positively associated with better health and behavior outcomes of children. Previous studies on relationships between poverty and child well-being dimensions provide the ground to propose that poverty has a negative impact on all child well-being dimensions in resource-rich LMI countries.

Proposition 4a: Child well-being outcomes are predicted by poverty in resource-rich LMI countries.

Proposition 4b: Poverty is associated with negative child well-being in resource-rich LMI countries by harming social protection systems.

Resource Dependence

Another economic outcome of the resource curse is resource dependence, the result of an abundance of natural capital such as mineral deposits, oil, and gas fields in resource-rich LMI countries (Gylfason, 2008; Hinojosa et al., 2010). Abundance means the natural capital that countries possess, whereas resource dependence means that a country's growth depends on these

natural resources (Gylfason, 2008). The share of mineral exports in a country's total exports or GDP is key to determining resource dependency, typically a minimum of 10% share of total exports and GDP (Hinojosa et al., 2010). Based on that baseline, the following ranking is used to classify mineral-dependent countries: high dependence—40% or more of the share of the mineral sector in total exports, medium dependence—20–39%, and low dependence—10–19%.

Based on the resource curse thesis, high dependence can be harmful for the development of countries. It is especially harmful in countries with existing corrupt or authoritarian governments (Hinojosa et al., 2010). High dependence emerges from a lack of diversification and hurts development and growth by blunting private and public incentives to save and invest (Gylfason, 2008). More precisely, when revenues from natural resources rise, the demand for capital falls, real interest rates go down, and growth faces obstacles (Gylfason & Zoega, 2006). Natural resource capital may crowd out real capital, weakening its quality, efficiency, and quantity (Zoega, 2006). Thus, governments or individuals who have full access to resource revenues would not see unproductive investments as problematic. Research on the effects of resource dependence in resource-rich LMI countries led me to conclude that resource dependence has a relationship with child well-being and suggest the following assumptions.

Proposition 6a: Resource dependency affects social protection systems, which influences child well-being in resource-rich LMI countries.

Proposition 6b: Resource dependency worsens child well-being in resource-rich LMI countries.

The resource curse and social protection

In resource-rich LMI countries, social protection is built based on local resources and needs. Regardless of the definition and structure of social protection in resources-rich LMI

40

countries, they are all affected by the spillover of the resource curse (Karl, 2004). In some resource-rich LMI countries, social protection is inefficient and poorly designed. They entail short-term interventions, which are mostly fuel and cash provision measures (Altincekic, 2012). Social security and labor market aspects of social protection in resource-rich LMI countries are in place and cover those who are employed and have privileges already, such as government officials, military personnel, and economic and political elites by excluding vulnerable groups.

As to the social welfare aspect of social protection in resource-rich LMI countries, they are inefficient, under-resourced, or not well developed. In some resource-rich LMI countries, social welfare excludes minorities based on their religious or political views, immigration status, or lifestyle, such as with nomadic tribes in Middle Eastern oil- and gas-rich countries. Based on the research on social protection in resource-rich LMI countries, I propose that social protection systems are negatively affected by the resource curse.

Proposition 7a: Overall, the resource curse negatively affects social protection systems in resource-rich LMI countries, which leads to poor child well-being outcomes.

1.4. Methods

1.4.1. Research Design

My aim is to test the relationships among selected dimensions from the suggested theoretical framework. The research uses a longitudinal design and secondary data for 18 years were entered into the model. Panel data analyses and structural equation modeling were used for this paper.

1.4.2.   Dataset and Data Management

A new special dataset was created for this paper. The data for each variable were extracted from different resources. Data for variables for child well-being came from UNICEF, UNESCO, and The World Bank. The data for variables in the resource curse was taken from the World Bank, Transparency International, and the World Bank's World Governance Indicators source. After cleaning, data were merged into one dataset. The original dataset had 25 variables. Some variables had information for 50 years since 1970. Some had information only for 19 years starting in 2002. The original dataset was created in a wide format. For the paper, the dataset was restructured into a long format. Observations in the dataset were countries. The initial dataset had 220 countries. Countries that had population below 200,000 people were removed from the dataset.

1.4.3.   Sampling

The sample for the study is the full population of low-to-middle income countries with and without resources. The list of countries was obtained from the World Bank data set. Based on the income classification criteria of the World Bank, high-income countries were excluded from the study. The World Bank classifies countries based on four annual gross national income groups: (a) low-income countries with less than $1000 per capita (b) low-middle income countries with up to $4080 per capita, (c) high-middle income countries with up to $12,000 per capita, and (d) high-income countries with over $12,000 per capita (World Bank, 2022). The final sample size for quantitative analysis was 137 countries.

1.4.4.   Variables and Measurement

Dependent Variable

The dependent variable for the study was an overall measure of child well-being, which was created by merging seven indices selected from the Child Rights Convention (CRC) of the UN. Due to the availability of the data for all LMI countries, the study was limited to indices to build a child well-being construct based on the indices described in Table 2. The selected indices cover two categories: survival and development. Survival had two dimensions such as nutrition and health. The health of children was measured by three indices such as neonatal, infant, and under-5 mortality rates. Neonatal, infant, and under-five mortality rates were measured the number of deaths per 1000 live births. I have converted rates into a percent for all three mortality rates: 0 being a low mortality rate 100 being a high mortality rate.

The nutritional status of children was measured by overweight and stunting indices. Overweight and stunting rates were measured originally in the percentage of children aged 0-59 months who are above two standard deviations from the median weight-for-height of the WHO Child Growth Standards. These two variables were kept in their original versions.

The development dimension of my child well-being index was measured by pre-primary and primary school enrolment rates. They were measured as percentages of enrollment of children in preprimary and primary schools. They measure 0 being low enrollment and 100 being high enrollment. These two variables were reverse scored for this paper to be consistent with the measurement direction of health and nutrition indices: 0 was a low enrollment rate whereas 100 was a high enrollment rate. For this paper, all variables were increasing in the same direction: 0 being bad child well-being and 100 being good child well-being. All seven indices were collapsed into one variable by summing their means to create an omnibus child well-being

variable. The theoretical range of the newly created child well-being variable is 0 low (bad child well-being) and 100 high (good child well-being).

Table 2: Dimensions for Dependent Variable of the Study

Category	Dimensions	Indices	CRC Articles
Survival	Food, nutrition	Stunting and overweight rates	CRC Art. 24
	Health	Infant, neonatal and under-5 mortality	CRC Art. 24
Development	Education	Preprimary and primary education enrollment rates	CRC Art. 28

Independent Variable

The independent variable for this study is the resource curse. Based on the availability of quantitative data for all LMI countries, this phenomenon is measured by oil rents per capita, the control of corruption, government effectiveness, democracy, political stability and absence of political violence and terrorism, and per capita income (see Table 3). The independent variable was divided into three groups—natural resource variables, political variables, and economic variables of the resource curse. During the data analysis, first oil rents per capita, followed by the political and then economic variables were entered into the models.

The study also mediated employment as a measure of social protection. The employment dimension for social protection was selected among others due to the availability of the data for all LMI countries.

Data for all independent variables were obtained from the World Bank and Transparency International open datasets. The Bank's data for control of corruption, government effectiveness,

democracy, and political stability were available from 2002 up to 2020. Due to COVID19, the data for 2020 were excluded. Thus, the study used data from 2002 up to 2019.

Table 3: Independent Variables

Independent variables	Data source
Natural resource	
Oil rents per capita	World Bank
Political factors	
Political stability & absence of violence/terrorism	World Bank
Control of corruption	World Bank
Government effectiveness	World Bank
Democracy	World Bank
Economic factor	
Poverty (per income capita)	World Bank
Mediator variables	
Employment	World Bank
Education	World Bank
Health	World Bank

Oil rents per capita were the independent variable from the natural resource category of the conceptual framework for this study. They are the difference between the value of crude oil, gas, and mineral production at regional prices and the total costs of production. They are percentages of GDP. World Bank (2022) calculates them from sources and methods described in the World the Changing Wealth of Nations.

Per capita income was used to measure the poverty aspect of the resource curse. According to the World Bank (2022) per capita income is gross domestic product divided by mid-year population. It is a sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Per capita income indicates the economic growth of a country, and it is the economic variable of the resource curse for this paper.

The control of corruption, government effectiveness, democracy, and political stability are political factors of the resource curse for this paper. The control of corruption describes perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. It is a percentile rank among all countries, ranging from 0 (lowest) to 100 (highest) rank.

Government effectiveness is perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. It is measured by percentile rank among all countries 0 being the lowest, 100 being the highest rank.

The democracy variable is measured by the voice and accountability, which reflects perceptions of the extent to which a country's citizens can participate in selecting their government, as well as freedom of expression, freedom of association, and free media. It is percentile ranking among all countries ranging from 0 (lowest) to 100 (highest).

The political stability and absence of violence/terrorism variable measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.

They were measured by the percentile ranking of countries ranging from approximately 0 (lowest) to 100 (highest). All four variables to measure the political aspect of the resource curse came from the Worldwide Governance Indicators, which were produced by Daniel Kaufman and Aart Kraay (World Bank, 2022). The data for all independent variables came from the World Bank.

The first mediation variable, employment is measured by the employment-to-population ratio, which is the proportion of a country's population that is employed. Employment here is defined as persons of working age (15+) who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period (i.e. who worked in a job for at least one hour) or not at work due to temporary absence from a job, or to working-time arrangements.

The second mediation variable, education, is measured as the government's expenditure on education. It is expressed as a percentage of GDP. It includes expenditure funded by transfers from international sources to the government. General government usually refers to local, regional, and central governments (UNESCO, 2021).

The third mediation variable is current health expenditure by general governments. It is named health for this paper. It is also calculated as a percentage of health expenditure expressed as a percentage of GDP. Estimates of current health expenditures include healthcare goods and services consumed during each year. This indicator does not include capital health expenditures such as buildings, machinery, IT, and stocks of vaccines for emergencies or outbreaks (World Health Organization, 2022). Both dependent and independent variables increase in the same direction, i.e., 0 means a low score and 100 means a high score.

1.4.5.   Data Analysis

The study used the mixed-effects linear regression model to determine the relationship between the resource curse and child well-being. To check the effect of the mediation on this relationship, I used the structural equation modeling method. The study used, micro, balanced, and equally spaced panel data for the analyses. Based on the results of the VIF test below, no multicollinearity among covariates and control variables was observed: as values of VIF do not exceed 10 (see Table 4).

Table 4: Multicollinearity Test

Independent Variables	VIF	1/VIF
Oil rent per capita	1.2	.84
Control of corruption	3.3	.31
Per capita income	1.1	.95
Government Effectiveness	2.5	.40
Political stability & absence of violence/terrorism	1.7	.60
Democracy	1.8	.56

However, based on the results of Breusch–Pagan/Cook–Weisberg and Whites tests for heteroskedasticity are not homoscedastic. The normality tests also revealed that the data (see Table 5) are not normally distributed (see Tables 6 and 7). As the sample size is over 50, the study proceeded with building random intercept and mixed-effects models.

Table 5: Breusch–Pagan/Cook–Weisberg test for Heteroskedasticity and Cameron & Trivedi's Decomposition of IM-Test

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity	Cameron & Trivedi's decomposition of IM-test			
	Source	**chi2**	**df**	**p**
chi2(20) = 8.81	Heteroskedasticity	66	20	.00
Prob > chi2 = .03	Skewness	46	5	.00
	Kurtosis	4.4	1	.04
	Total	116	26	.00

Table 6: Skewness and Kurtosis Tests for Normality

Variable	Observations	Pr (skewness)	Pr (kurtosis)	Adj chi2(2)	Prob>chi2
Child Well-being	108	.00	.08	18	.00

Table 7: Shapiro-Wilk Test

Variable	Observations	W	V	Z	Prob>z
Child Well-being	2,322	0.87	11	5.4	.00

1.4.6.   Models

After building a null model, four different models were built by adding predictors. The first random intercept model was built to check the association between one of the measures of natural resources, the oil rents per capita, and child well-being.

Table 8: Random Intercept Model 1 With Oil Rents Per Capita

Predictors	Coefficient	SE	z	$p > |z|$	CI (95%)
Oil per capita	.83	.16	5.18	.00	.51 1.14

Note. (*N*=2230; countries=127)

Based on values of chi-square the third model has a predictive capacity ($p<0.05$,

Chi=.00). The second random intercept model estimated political factors such as the control of

corruption, government effectiveness, democracy, and political stability, and no

violence/terrorism.

Table 9: Random Intercept Model 2 With Political Factors for Years Between 2002–2018

Predictors	Coefficient	SE	z	$p > |z|$	CI (95%)
Oil rents per capita	-.91	.18	-5.4	.00	-1.23 -.58
Control of corruption	.12	.11	1.0	.30	-.10 .33
Government effectiveness	.10	.11	.96	.33	-.11 .32
Democracy	.04	.11	.32	.75	-.19 .26
Political Stability	.06	.07	.83	.40	-.08 .21

Note. (N=2217; countries=127)

The second model has also predictive capacity ($p<0.05$, Chi=.01). The third random

intercept model was built by adding the economic factor of the resource curse, and poverty and

measured by the per capita income.

Table 10: Random intercept model with oil rents per capita, political, and economic variables
(2002 to 2018)

	Model 3				
Random Effects	Coefficient	SE	z	$p> |z|$	CI (95%)
Oil rent per capita	-.88	.17	-5.24	.00	-1.20 -.55
Control of Corruption	.12	.11	1.05	.30	-.10 .34
Government Effectiveness	.11	.11	1.01	.31	-.10- .32
Democracy	.04	.11	0.38	.70	-.18 .26

Political Stability	.06	.07	0.80	.42	-.10 .20
Per capita income	.00	.00	0.28	.78	-.00 .00

Note. (*N*=2217; countries=127)

Based on values of chi-square, the third model has prediction capacity (*p*<0.05, Chi=.00).

The fourth, the mixed-effects model, allowed all predictors—natural resource, political, and

economic variables—vary across years.

Table 11: Mixed-Effects Model 4 (Random Intercept Model) With Oil Rents Per Capita,
Economic, and Political Predictors (2002 to 2018)

	Model 4				
Predictors	**Coefficient**	**SE**	**z**	**p> |z|**	**CI (95%)**
Oil per capita	-.88	.16	-5.35	.00	-1.20 -.57
Control of Corruption	.12	.11	1.05	.29	-.10 .34
Government Effectiveness	.11	.11	1.02	.30	-.10 .32
Democracy	.04	.11	.39	.04	-.17 .26
Political Stability	.05	.07	.80	.42	-.08 .20
Per capita income	.00	.00	.28	.03	-.00 .00

Note. Model 4 (N=2216; countries=127)

The mixed-effects model also has a predictive capacity (*p*<0.05, Chi=.00). Based on the

values of AIC and BIC, the final model, the mixed-effects linear regression model was chosen to

be the final model for this paper (see Table 12).

Table 12: AIC and BIC values

Models	Df	AIC	BIC
Model 1	4	14895	14918
Model 2	8	14850	14895
Model 3	9	14838	14890
Model 4	9	14838	14890

1.5. Findings

1.5.1. Descriptive Statistics

After meeting all assumptions, the final model, a mixed-effects linear regression model with all predictors, was run to test the relationship between the resource curse and child well-being. Six independent variables were entered into the final model. Child well-being had 2322 observations, with a mean rate of 40. The average score for control of corruption had 2366 cases with a mean percentage of 34 and no high variability among groups (*SD* 22). Government effectiveness had 2358 cases with a mean percentage of 35. Political stability had 2355 cases and the mean percentage was 34 and democracy had 2353 cases with a mean of 35%. The observations varied significantly per income capita as the average score was 3882 USD dollars and SD was 6551.839 USD dollars.

Table 13: Descriptive Statistics

Variable	*N*	Mean	SD	Min	Max
Child Well-being	2322	40	14	6	111
Oil rents per capita	2230	4.2	10	0	67
Control of corruption	2366	35	22	0	92
Government Effectiveness	2358	36	22	0	90
Political stability	2355	34	22	0	99
Democracy	2353	35	22	0	92
Per capita income	2263	3882	6551	112	15492

1.5.2. Mixed-Effects Linear Regression Findings

The mixed-effects linear regression model had 2206 observations in 126 LMI countries. Based on the results of this model, oil rents per capita, democracy, and per capita income were statistically significant. Changes in all three variables predicted the changes in child well-being over the years. One unit increase in oil rents per capita resulted in a 88 percent decrease in child well-being rates, (b=-.88, SE=0.16, z=-5.35, p<0.00) (See table 11). As oil rents per capita increased in countries, child well-being worsened. A one-dollar increase in per capita income resulted in a 1 percent increase in child well-being rates (b=-.001, SE=0.001, z=-2.85, p<0.004). As the income of people increased, child well-being improved. One percent increase in democracy predicted a 4 percent increase in child well-being (b=.04, SE=0.11, z=39, p<0.03). Democracy positively affected child well-being: as countries performed better in democracy, child well-being improved.

After running the mixed-effects model for checking the association between the resource curse and child well-being (direct effect), I also tested the association with a mediator. The theoretical model suggested social protection as a mediator between resource curse and child well-being. Due to the availability of worldwide data, I selected employment, health, and education spending from GDP by governments as measures of social protection. The study used structural equation modeling to test the relationship between the resource curse and child well-being with the mediator, social protection (see Table 14).

The mediation analysis was estimated with the maximum likelihood method and robust estimators. Based on the values of the goodness of fit tests, the model fits the data and the model has a predictive capacity (model fit: $\chi^2(000) = 165.866$, $p < .001$; CFI $= 0.765$; TLI $= -0.408$; RMSEA $= 0.199$ (0.00–0.00). ***$p < .000$). Based on the mediation model (see Table 14), when mediated by employment, health, and education, all variables except education had a direct statistically significant relationship with child well-being. As the employment rate increased by 1 percent, child well-being increased by 9 percent. In other words, child well-being improved with an increase in employment rates (b=(0.09, SE=.02, $p<0.00$).

One percent increase in oil rents per capita predicted a 6 percent decrease in child well-being, (b=(-.06, SE=2.28, $p<0.03$). As oil rents per capita increased, child well-being declined. Democracy had a positive statistically significant relationship with child well-being. As democracy increased in countries by 1 percent in ranking, child well-being increased by 8 percent (b=.08, SE=2.8, $p<0.03$) which means that by improvement in democratic performance by countries, child well-being also improved. A 1% increase in per capita income resulted in a 10% increase in child well-being, (b=0.10, SE=0.00, $p<0.00$). This finding indicated that as nations got richer, child well-being also improved.

Health spending by governments also had a positive statistically significant relationship with child well-being. As spending on health by the government increased by 1%, the child well-being rates also increased by 44% (b=.44, SE=0.09, $p<0.00$). This result implies that as health care improves, child well-being gets better too.

Table 14: Mediation Analysis

Variables	B	SE	z	P > (z)	Confidence interval (95%)
Structural					
Child well-being					
Employment	.09	.02	5.52	.00	.05 .11
Oil rents per capita	-.06	2.8	-2.21	.03	-.12 -.00
Democracy	.08	.01	-8.0	.00	.13 .08
Per Capita Income	.01	.00	9.8	.00	.09 .06
Education	-.21	.11	-1.9	.05	-.41 .00
Health	.44	.09	4.9	.00	.61 .26
Employment					
Oil rents per capita	-.16	.05	-3.2	.01	-.26 -.07
Democracy	.09	.02	5.0	.00	.12 .05
Per Capita Income	.01	.01	3.33	.01	.06 .07
Education					
Oil rents per capita	-.12	.01	-1.7	.09	-.02 -.00
Democracy	.01	.00	-8.5	.00	.02 .03

Per Capita Income	.00	.00	0.32	.75	.00 .00
Health					
Oil rents per capita	-.08	.01	-8.51	.00	-.09 -.06
Democracy	.01	.00	3.45	.00	.00 .02
Per Capita Income	.01	.00	0.39	.69	.00 .02

Different from the direct effect, when mediated by employment and healthcare, oil rents per capita had a positive indirect statistically significant relationship with child well-being. As mediated by employment, a 1% increase in oil rents per capita predicted a 16% increase in child well-being (b=.08, SE=0.05, $p<0.01$). It means that when employment is improved in oil-rich countries oil rents per capita lose their negative effect on child well-being. Based on the results of the Sobel's test which were significant, the mediation by employment between the oil rents per capita and child well-being was partial. About 18 % of the effect of oil rents per capita on child well-being is mediated by employment (indirect effect /total effect, 13.781 / 77.494) = 0.178). That is, the mediated effect is about 0.2 times large as the direct effect of oil rents per capita on child well-being (indirect effect/direct effect (13.781 / 63.713) = 0.216) (See table 15).

When mediated by healthcare, a 1% increase in oil rents per capita predicted an 8% increase in child well-being (b=.08, SE=0.01, $p<0.00$). It means that when healthcare is improved in oil-rich countries oil rents per capita lost their negative effect on child well-being. As the result, as oil rents per capita increase with better health, child well-being also improves. Based on the results of the Sobel's test which was significant, the mediation between oil rents per capita and child well-being by health was partial. About 108 % of the effect of oil rents per capita on child well-being is mediated by health (indirect effect /total effect) (33.129 / 30.584) =

1.083. That is, the mediated effect is about 0.5 times large as the direct effect of oil rents per capita on child well-being (indirect effect/direct effect (33.129 / 63.713) = 0.520). But when mediated with education oil rents per capita did not have a statistically significant relationship with child well-being.

Democracy had a positive effect on child well-being as a direct effect when it was mediated with all three mediators: employment, healthcare, and education. As mediated by employment, a 1% increase in democracy predicted a 9% increase in child well-being (b=.09, SE=0.02, p<0.01). Based on the results of the Sobel's test which was significant, the mediation by employment was partial. About 9% of the effect of democracy on child well-being is mediated by employment (indirect effect /total effect, (7.481 / 87.429) = 0.086). That is, the mediated effect is about 0.1 times large as the direct effect of democracy on child well-being (indirect effect/direct effect (7.481 / 79.947) = 0.094).

As mediated by education, a 1% increase in democracy predicted a 1% increase in child well-being (b=.01, SE=0.00, p<0.00). Based on the results of the Sobel's test which was significant, the mediation by education was partial. About 5% of the effect of democracy on child well-being is mediated by education (indirect effect /total effect, (4.402 / 84.349) = 0.052). That is, the mediated effect is about 0.1 times large as the direct effect of democracy on child well-being (indirect effect/direct effect (4.402 / 79.947) = 0.055).

When mediated by health, a 1% increase in democracy predicted a 1% increase in child well-being (b=.01, SE=0.00, p<0.00) which means an improvement in child well-being for this paper. Based on the results of the Sobel's test which was significant, the mediation by health between democracy and child well-being was partial. About 6% of the effect of democracy on child well-being is mediated by health (indirect effect /total effect, (4.674 / 84.621) = 0.055. That

is, the mediated effect is about 0.1 times large as the direct effect of democracy on child well-being (indirect effect/direct effect (4.674 / 79.947) = 0.058).

Per capita income had a statistically significant positive association with child well-being only with the mediation of employment. Neither education nor health mediated the relationship between per capita income and child well-being. This result is different from the direct effect of per capita income on child well-being. When mediated by employment, a 1% increase in per capita income predicted a 1% increase in child well-being (b=.01, SE=0.01, $p<0.01$). Based on the results of Sobel's test which was significant, the mediation by employment was partial. About 5% of the effect of per capita income on child well-being is mediated by employment (indirect effect /total effect, (0.015/0.279) = 0.053). That is, the mediated effect is about 0.1 times as large as the direct effect of per capita income on child well-being (indirect effect/direct effect (0.015/0.264) = 0.056).

Table 15: Significance Testing of Indirect Effects (Unstandardized)

Independent variables	Mediators	Sobel's test	SE	z-value	p value	Conf. interval
Oil rent per capita	Employment	-13.8	5.01	-2.8	.01	-23.54, -4.10
Per Capita Income	Employment	0.06	0.01	2.85	.00	17.83, 48.43
Democracy	Employment	7.5	2.02	3.7	.00	11.45, -3.52
Democracy	Education	4.02	2.34	1.85	.06	9.01, 0.04
Oil rents per capita	Health	33.13	7.04	4.24	.00	17.84, 48.46
Democracy	Health	4.67	1.67	2.82	.01	8.24, 1.80

1.6. Discussion

The findings above address the relationship between the resource curse and child well-being. The study used mixed-effects linear regression panel analysis to test the relationship between the indices of the resource curse and child well-being. To check the relationship between child well-being and the resource curse, I tested three random intercept and mixed-effects linear regression models after building the null model. Three random intercept models predicted changes in child well-being by variability in natural resource variables of oil; political variables such as democracy, and political stability; and the economic variable of per capita income. I also tested the relationship between the resource curse and child well-being through the mediator, social protection with structural equation modeling. Employment, health, and education were measures of social protection for this paper. The study used panel data from 2002 to 2019. Data only for 137 LMI countries were entered into the models. Based on AIC and BIC values, the fourth model, the mixed-effects linear regression model, was selected to be the final model.

The results of analyses revealed that oil rents per capita, democracy, and per capita income had a statistically significant relationship with child well-being. Mixed-effects linear regression analysis showed that oil rents per capita had a negative direct effect on child well-being. As countries get oil money, child well-being declined. But when the relationship between oil rents per capita and child well-being was mediated by employment and health, the oil rents per capita lost its negative effect on child well-being, and opposite it improved child well-being. Both employment and health care partially mediated the relationship between oil rents per capita

and child well-being. If countries with oil, invest in employment and health policies, the oil will not affect child well-being negatively, opposite it will have a positive effect on child well-being.

Mixed-effects linear regression analysis also found that as democracy improved, child well-being also improved. This relationship stayed the same when it was mediated by employment and health. Employment and health partially mediated the relationship between democracy and child well-being. Per capita income had a positive direct relationship with child well-being in mixed-effects linear regression analysis. Only employment partially mediated the relationship between per capita income and child well-being.

The findings of this study about the direct relationship between oil wealth, democracy per capita income, and child well-being were consistent with published research on the relationship between oil wealth, democracy, per capita income, and child well-being dimensions, which were the focus of this paper. Wigley (2017) employed a panel of 167 countries for each year from 1960 to 2011 and found a positive association between oil income and the under-5 mortality rate. He also found a causal channel through which petroleum wealth has a harmful effect on child health. Scholars on resource-rich countries indicated that among other social problems, the resource curse is linked to unusually high rates of child mortality (Karl, 2005; Torvic, 2002; Wadho, 2014).

Oil, gas, and mineral-rich countries saw median levels of infant deaths drop by 8.4% and 3.4%, respectively, during this 5-year period (UNICEF, 2014) when the global norm was 11.9% (UNRISD, 2014). Among oil, gas, and mineral-rich, autocracies saw levels of infant mortality rates drop by 4.2% (UNRISD, 2014). Mixed regimes and democracies were apparently able to do more with their resource booms, showing median improvements of 15.3% and 18%, respectively (UNRISD, 2014). Similar, though more modest differences are observed among

mineral-rich countries. Between 2000 and 2005 autocracies experienced a median decline in infant deaths of 2.3% compared to a decline in infant deaths of 5.7% and 13.6% for mixed regimes and democracies, respectively (UNRISD, 2014).

The study also found a statistically significant relationship between democracy and child well-being. Wigley and Akkoyunlu-Wigley (2017) also found a statistically significant relationship between electoral, political, competitive participation, free media, and under-5 mortality rate in their panel analysis of 167 countries. They found a negative relationship between democracy and under-5 mortality, as democracy increased under-5 mortality rates decreased. This relationship was even greater in the presence of free media. Wigley and Akkoyunlu-Wigley argued that not only the existence of democracy but also two central elements of democratic rule— contestation and participation—play an important role in enhancing the health of children. Gerring et al. (2012) and McGuire, (2012) also found a robust negative relationship between infant mortality and democracy in their studies. These findings suggest that democratic reforms can have a beneficial effect on child well-being in general, child health in particular.

This result of the study, the association between democracy and child well-being, overlaps with Amartya Sen's (2009) seminal argument that democratic governments do better than nondemocratic governments in responding to shocks that threaten the poor such as famines and endemics. The finding on the relationship between democracy and child well-being builds upon and extends Sen's argument that democracy plays an important role in improving the well-being of children.

The study also found that per capita income influenced child well-being. This finding confirms previous research on testing the relationship between national income and child well-

being indicators. Houweling et al. (2005) in their study covering 45 developing countries found an association between higher national income and under-5 mortality rate ($p <.014$). O'Hare et al. (2013) in their systematic review and meta-analysis of 24 studies that explored the relationship between national income and child mortality in developing countries found income as an important determinant of under-5 mortality. They found that if the country has 10% increase in GDP per capita purchasing power, child mortality decreases from 50% to 45% of 1000 live births.

The mediation analysis indicates that the child well-being index improved in oil-rich countries when health and employment are introduced as mediators. These findings indicate that when governments in oil-rich countries invest in employment and health, oil wealth may have a positive effect on child well-being. Democracy had a similar positive indirect effect on child well-being as the direct effect. As democracy improved with the mediation of employment and health, child well-being also improved. Unlike the direct effect, when per capita income is mediated by health, education, and employment, it maintained its effect on child well-being only with the mediation of employment. When mediated with education, democracy did not influence child well-being.

Based on the result of this paper, it can be concluded that employment and health play an important role to reduce the negative effect of oil in oil-rich countries. The research and policy implications of the study are the following: the governments in oil-rich countries need to invest in employment policies and health care to have good child well-being in oil-rich countries. For policy implications, the policies focusing on the alleviation of poverty, increasing employment, and health care policies that are effective in nondemocratic societies need to be tested in nondemocratic oil countries. Singapore, as a nondemocratic country, has implemented several

types of asset-building strategies, such as Baby Bonus with Child Development accounts, MediSave, EduSave to provide effective health, and education services for children. China tests asset-building interventions such as child development accounts to improve the education aspect of child well-being. These policies that work in Singapore and Chine to alleviate poverty in families' well-being of children can be good examples. The employment and health care policies of both countries can be a good example for oil-rich countries. The National Health System of Cuba is another good model of health care policy for oil-rich countries (Keck & Reid, 2012; Pineo, 2019). Turkiye's primary health care system which reaches low-to-middle income people can be a good example for oil-rich LMI countries (Hazama, 2015).

The research implication of the study is that further research needs to focus on finding strategies and interventions directly related to children to improve their well-being in LMI countries with oil resources. The democratization process in LMI countries takes a longer time and it might never happen for some countries, especially which have oil resources. But children need effective interventions now.

The findings of this paper make several contributions to both the resource-curse and child well-being literature. The first contribution is enriching the literature on the resource curse and child well-being from the perspective of these two phenomena. Literature in the resource-curse field is growing, but studies exploring the effect of the resource curse on vulnerable groups in resource-rich LMI countries are limited. Thus, this study has a huge contribution to increasing the number of quantitative studies on vulnerable groups. Another methodological uniqueness of the study is the child well-being index that I created for this paper to use as an outcome variable to measure the well-being of children in all LMI countries. Previous studies on the relationship between resource curse and child well-being looked at only the former's effect on under-5

mortality. My child well-being index encompasses under-5 mortality as one of seven indicators in addition to indicators on education and the nutritional situation of children. It gives chance to look at the relationship between the resource curse and the situation of education and nutrition of children in all LMI countries in addition to only health-related indicators.

The mediation analysis of the study is another unique contribution to testing the relationship between the resource curse and child well-being. Previous studies did not have social protection as the mediator in their analysis. That is, the results of the mediation analysis are a valuable contribution of this study to the resource curse literature.

My study also has several limitations. The first limitation is the unavailability of data on all indicators of child well-being which are mentioned in the CRC of the UN. This limitation made me limit my child well-being index only to health, nutrition, and education indicators. I could not measure other child well-being indicators. The second limitation emerged due to the COVID19 pandemic: due to this problem, I could not include quantitative data for 2020-2021 in my study.

1.7. Conclusion

Since the late 1980s, the adverse effects of the resource curse on democracy, rule of law, political systems, governance, the economy, GDP, accountability, and transparency have been extensively studied (Collier, 2016; Gilles, 2016; Karl, 2007; Ross, 2012; Sachs, 2001, 2016; Sachs & Werner, 1995). Starting in 2012, scholars have discussed the absence of social policy-related research studies as one of the missing pieces in the resource curse literature (Hinojosa 2012). Some applied scholars have discussed the social security role in social policy, yet few specific studies have been conducted. In addition, few papers have looked at the relationship

between the resource curse and the situation of vulnerable groups in oil and gas-rich countries. Two of them extended the resource curse theory to child mortality (Makhlouf, 2017; Wigely, 2017), and one of them to HIV/AIDS (Soysa and Gizelis, 2013). One study discussed the situation of women (Ross, 2012). Studying each vulnerable group separately in the context of the resource curse will help to determine the impact of the resource curse and suggest tailored interventions. It will also enrich the resource curse literature.

This conceptual framework aimed at extending the resource curse theory to children and their well-being to guide future research and scholarly work in this field. The conceptual model provides guidance for interested scholars to generate new knowledge and evidence to explain links between the resource curse and child well-being. In addition, little information exists about the strategies, programs, and policies that may increase the well-being of children in resource-rich LMI countries. By suggesting this conceptual framework, I hope that empirical work generated based on it will suggest implications for effective policies and services for child well-being in all recourse-rich countries. In the conceptual framework I tried to bring light to the situation of children in resource-rich LMI countries in a way that may suggest interventions for positive change. I hope that by discussing the link between dimensions of the resource curse and child well-being, this article can bring clarity to many hidden factors causing failure in reforming child well-being, especially in resource-rich LMI countries.

From a larger perspective, this inquiry is about child well-being as a key foundation of a nation's development and advancement. Vulnerable groups are always barometers of social development. When children enjoy secure well-being, they are more likely to contribute positively to the economy and society when they become adults. At some point, the oil will be

gone, or will no longer generate revenue, but the quality and competence of the people will always be fundamental.

1.8. References

Acemoglu, D., Verdier, T., & Robinson, J. A. (2004). Kleptocracy and divide-and-rule: A model of personal rule. *Journal of the European Economic Association*, 2(2-3), 162-192.

Acemoglu, D., & Robinson, J. A. (2006). De facto political power and institutional persistence. *American economic review*, 96(2), 325-330.

Ahmed, M. I., & Cassou, S. P. (2016). Does consumer confidence affect durable goods spending during bad and good economic times equally? *Journal of Macroeconomics*, 50, 86-97.

Ahmadov, A. K. (2014). Oil, democracy, and context: A meta-analysis. *Comparative Political Studies,* 47(9), 1238-1267.

Alkire, S., & Santos, M. E. (2010). Multidimensional Poverty Index 2010: Research Briefing. Retrieved from https://ora.ox.ac.uk/objects/uuid:f150e243-8675-4899-a292-fd006aeaf038

Altincekic, C. (2012). *The déterminants of social expenditures in the Middle East: Oil, taxes, and electoral fraud* (Doctoral dissertation, University of Colorado-Boulder). https://scholar.colorado.edu/concern/graduate_thesis_or_dissertations/m039k508b

Andersen, J. J., Johannesen, N., Lassen, D. D., & Paltseva, E. (2017). Petro rents, political institutions, and hidden wealth: Evidence from offshore bank accounts. *Journal of the European Economic Association*.

Asian Development Bank (ADB) (2003). Social Protection. Asian Development Bank. Available at: http://www.adb.org/sites/default/files/pub/2001/social-protection.pdf

Anderson, O. L. (2011). Avoiding Dutch disease and bad policy choices. *North Dakota Law Review, 87*: 475–484. https://commons.und.edu/ndlr/

Arezki, R., & Brückner, M. (2011). Oil rents, corruption, and state stability: Evidence from panel data regressions. *European Economic Review*, 55(7), 955-963.

Ascher, W. (2012). Mineral wealth, development and social policy in Indonesia. In K. Hujo (Ed.) *Mineral rents and the financing of social policy: Opportunities and challenges* (pp. 223–256). *Palgrave Macmillan*. https://doi.org/10.1057/9780230370913_8

Andrews, M., Hay, R., & Myers, J. (2010). Can governance indicators make sense? Towards a new approach to sector-specific measures of governance. *Oxford Development Studies, 38*(4), 391–410. https://doi.org/10.1080/13600818.2010.524696

Auty, R., & Warhurst, A. (1993). Sustainable development in mineral exporting economies. *Resources Policy,* 19(1), 14-29.

Auty, R. M. (2001). Transition reform in the mineral-rich Caspian region countries. *Resources Policy*, 27(1), 25-32.

Auty, R. M. (2007). Patterns of rent extraction and deployment in developing countries: implications for governance, economic policy and performance. *In Advancing Development* (pp. 555-577). Palgrave Macmillan, London.

Aidis, R., Estrin, S., & Mickiewicz, T. (2008). Institutions and entrepreneurship development in Russia: A comparative perspective. *Journal of business Venturing, 23*(6), 656-672.

Aslaksen, S. (2010). Oil and democracy: More than a cross-country correlation?. *Journal of Peace Research*, 47(4), 421-431.

Baldwin, N & Spencer, N. (2005), *Economic, cultural and social contexts of neglect*, London: Jessica Kingsley Publishers

Baland, J.-M., & Francois, P. (2000). Rent-seeking and resource booms. *Journal of Development Economics, 61*(2), 527–542. https://doi.org/10.1016/S0304-3878(00)00067-5

Bhattacharyya, S., & Hodler, R. (2010). Natural resources, democracy and corruption. *European Economic Review, 54*(4), 60–621. https://doi.org/10.1016/j.euroecorev.2009.10.004

Beblawi H, Luciani G, eds. (1987). Nation, State and Integration in the Arab World. Vol. II: The Rentier State. London: Croom Helm

Ben-Arieh, A.; Casas, F.; Frones, I.; and Korbin, J. (2014). Multifaceted Concept of Child Well-Being. Chapter 1, Handbook on Child Well-being. DOI 10.1007/978-90-481-9063-8_134

Ben-Arieh, A. (2006). Is the study of the "state of our children" changing? Re-visiting after 5 years. Children and Youth Services Review, 28(7), 799–811.

Ben-Arieh, A. (2012). How do we measure and monitor the "state of our children"? Revisiting the topic in honor of Sheila B. Kamerman. Children and Youth Services Review, 34(3), 569–575.

Ben-Arieh, A., Casas, F., Frønes, I., & Korbin, J. E. (2014). Multifaceted concept of child well-being. *Handbook of child well-being*, 1, 1-27.

Burchi, F. (2011). Democracy, institutions, and famines in developing and emerging countries. *Canadian Journal of Development Studies/Revue Canadienne d'Études du Développement, 32*(1), 17–31. https://doi.org/10.1080/02255189.2011.576136

Boschini, A. D., Pettersson, J., & Roine, J. (2007). Resource curse or not: A question of appropriability. *Scandinavian Journal of Economics*, *109*(3), 593-617.

Bradshaw, J., Hoelscher, P., & Richardson, D. (2007). An index of child well-being in the European Union. *Social indicators research*, 80(1), 133-177.

Brollo, F., Nannicini, T., Perotti, R., & Tabellini, G. (2013). The political resource curse. *American Economic Review, 103*(5), 1759-96.

Caselli, F., & Michaels, G. (2013). Do oil windfalls improve living standards? Evidence from Brazil. *American Economic Journal: Applied Economics*, 5(1), 208-38.

Camfield, Laura; Streuli, Natalia; and Woodhead, Martin (2010). Children's Well-being in Developing Countries: A Conceptual and Methodological Review. *The European Journal of Development Research*. London Vol. 22, Iss. 3, (Jul 2010): 398-416. DOI:10.1057/ejdr.2010.11

Cerami, A. (2009). Welfare State Developments in the Russian Federation: Oil-led Social Policy and 'The Russian Miracle'. *Social Policy Administration*, 43, 2, pp.105-120

Chaudry, A., & Wimer, C. (2016). Poverty is not just an indicator: the relationship between income, poverty, and child well-being. *Academic pediatrics*, 16(3), S23-S29.

Cho, E. Y. N., & Yu, F. Y. (2020). A review of measurement tools for child wellbeing. *Children and Youth Services Review*, 119, 105576.

Challender, C., Heaton, A., King, F., Herringshaw, V., & Bell, B. (2003). Lifting the resource curse: extractive industry, children and governance. Ensuring that extractive industries benefit children. Briefing report.

Campos, N. F., & Nugent, J. B. (1999). Development performance and the institutions of governance: evidence from East Asia and Latin America. *World Development*, 27(3), 439-452.

Chzhen, Y., Gordon, D., & Handa, S. (2018). Measuring multidimensional child poverty in the era of the sustainable development goals. *Child Indicators Research*, *11*(3), 707-709.

Collier, P., & Gunning, J. W. (1999). Why has Africa grown slowly?. *Journal of economic perspectives,* 13(3), 3-22.

Collier, P. (2010). Social Protection in Resource-Rich Low-Income Countries. In European

    Report on Development, Prepared for the Workshop:"Experiences and Lessons from

    Social Protection Programmes across the Developing World: What Role for the EU.

Collier, P. and Goderis. B. (2012). "Commodity prices and growth: An empirical investigation."

    European Economic Review 56, no. 6: 1241-1260.

Collier, P., Kirchberger, M., & Söderbom, M. (2016). The cost of road infrastructure in low-and

    middle-income countries. *The World Bank Economic Review*, 30(3), 522-548.

Davis, J. M., Fedelino, A., & Ossowski, R. (2003). Fiscal policy formulation and implementation

    in oil-producing countries. In Fiscal Policy Formulation and Implementation in Oil-

    Producing Countries. International Monetary Fund.

Delavallade, C. (2006). Corruption and distribution of public spending in developing

    countries. *Journal of economics and finance*, 30(2), 222-239.

De la Croix, D., & Delavallade, C. (2009). Growth, public investment and corruption with failing

    institutions. Economics of Governance, 10(3), 187.

de Neubourg, C., Chai, J., de Milliano, M., & Plavgo, I. (2012). Cross-country MODA study.

    https://www.unicef-irc.org/publications/696-cross-country-moda-study-multiple-

    overlapping-deprivation-analysis-moda-technical.html

Delamonica, E. E., & Minujin, A. (2007). Incidence, depth and severity of children in poverty.

    Social Indicators Research, 82(2), 361-374.

Davoodi, M. H. R., & Tanzi, M. V. (1997). Corruption, public investment, and growth.

    International Monetary Fund.

Enste, D. H., & Heldman, C. (2018). The consequences of corruption. In Handbook on the

    Geographies of Corruption. Edward Elgar Publishing.

Eicher, T., & García-Peñalosa, C. (2008). Endogenous strength of intellectual property rights: Implications for economic development and growth. *European Economic Review*, 52(2), 237-258.

Gerring, J., Thacker, S. C., & Alfaro, R. (2012). Democracy and human development. *The Journal of Politics*, 74(1), 1-17.

Goswami, H., Fox, C., & Pollock, G. (2016). The current evidence base and future needs in improving children's well-being across Europe: Is there a case for a comprehensive longitudinal survey? *Child Indicators Research,* 9(2), 371–388.

Glatman-Freedman, A., Cohen, M. L., Nichols, K. A., Porges, R. F., Saludes, I. R., Steffens, K., Rodwin, V. G., & Britt, D. W. (2010). Factors affecting the introduction of new vaccines to poor nations: A comparative study of the Haemophilus influenzae type B and hepatitis B vaccines. *PLoS One*, 5(11), e13802. https://doi.org/10.1371/journal.pone.0013802

Gylfason, T. (2001). "Natural Resources, education and Economic Development. European Economic Review, 45, 847–859. https://doi.org/10.1016/S0014-2921(01)00127-1

Gylfason, T. (2008). Development and Growth in Mineral-Rich Countries. Center for Economic Policy Research. Discussion Paper No. 7031.

Glaeser, E.L., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. (2004). "Do Institutions Cause Growth?" Journal of Economic Growth, 9: 271-303.

Gylfason, T., & Zoega, G. (2006). Natural resources and economic growth: The role of investment. World Economy, 29(8), 1091-1115.

Gylfason, T. (2012). Development and growth in resource-dependent countries: Why social policy matters. In Mineral Rents and the Financing of Social Policy (pp. 26-61). Palgrave Macmillan, London.

Gupta, S., De Mello, L., & Sharan, R. (2001). Corruption and military spending. European

    journal of political economy, 17(4), 749-777.

Greenberg, A. L., & Partskhaladze, N. (2014). How the Republic of Georgia has nearly

    eliminated the use of institutional care for children. *Infant mental health journal*, 35(2),

    185-191.

Gupta, A. (2017). Poverty and child neglect–the elephant in the room? Families, Relationships

    and Societies, 6(1), 21-36.

Hasanov, F. (2013). Dutch Disease and Azerbaijan. *Communist and Post-Communist Studies*, 46,

    463-480

Hazama, Y. (2015). Health reform and service satisfaction in the poor: Turkey 2003–11. *Turkish*

    Studies, 16(1), 36-53.

Holmberg, S., & Rothstein, B. (2011). Dying of corruption. *Health Economics Policy and Law*,

    6, 529–547. https://doi.org/10.1017/S174413311000023X

Hooper, C., Gorin, S., Cabral, C., & Dyson, C. (2007). Living with hardship 24/7: The diverse

    experiences of families in poverty in England. Frank Buttle Trust.

    https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.613.2722&rep=rep1&type=pd

    f

Hodler, R. (2006) 'The curse of natural resources in fractionalized countries. *European*

    Economic Review, 50(6), 1367–1386.

Houweling, T. A., Kunst, A. E., Looman, C. W., & Mackenbach, J. P. (2005). Determinants of

    under-5 mortality among the poor and the rich: a cross-national analysis of 43 developing

    countries. *International journal of epidemiology*, 34(6), 1257-1265.

Humphreys, M., Sachs, J.D, and Stiglitz, J. E. (2007) 'Escaping the Resource Curse.' Columbia University Press. New York.

Humphreys, M. (2005). Natural resources, conflict, and conflict resolution: Uncovering the mechanisms. Journal of conflict resolution, 49(4), 508-537.

Huang, H., & Xu, C. (1999). Institutions, innovations, and growth. *American Economic Review*, 89(2), 438-443

Hinojosa, L., Bebbington, A., & Barrientos, A. (2012). Social policy and state revenues in mineral-rich contexts. In Mineral Rents and the Financing of Social Policy (pp. 91-121). Palgrave Macmillan, London.

Hujo, K. (2012). Introduction and overview: blessing or Curse? Financing social Policies in Mineral-rich Countries. In Mineral rents and the financing of social policy (pp. 3-25). Palgrave Macmillan, London.

International Monetary Fund. (2007). Guide on Resource Revenue Transparency. Retrieved on May 26, from http://www.imf.org/external/np/pp/2007/eng/101907g.pdf

Isham, J., Woolcock, M., Pritchett, L., & Busby, G. (2005). The varieties of resource experience: natural resource export structures and the political economy of economic growth. *The World Bank Economic Review*, 19(2), 141-174.

Franke, A., Gawrich, A., & Alakbarov, G. (2009). Kazakhstan and Azerbaijan as post-Soviet rentier states: resource incomes and autocracy as a double 'curse'in post-Soviet regimes. Europe-Asia Studies, 61(1), 109-140.

Farooq, A., Shahbaz, M., Arouri, M., & Teulon, F. (2013). Does corruption impede economic growth in Pakistan? *Economic Modelling*, 35, 622-633.

Karl, T. L. (2000). Economic inequality and democratic instability. *Journal of Democracy*, 11(1), 149-156.

Karl, T. L. (2004). Oil-Led Development: Social, Political, and Economic Consequences. In Encyclopedia of Energy, 661-672

Karl, T. L. (2007). Ensuring fairness: The case for a transparent fiscal and social contract. In M. Humphreys, J. D. Sachs, and J. E. Stiglitz (Eds.), Escaping the Resource Curse (pp. 256–286). Columbia University Press.

Karimli, L. (2007). Informed Citizen, Accountable Government and Effective Management of Oil Resources. http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CDIQFjAB&url=httpper cent3Aper cent2Fper cent2Fwww.policy.huper cent2Fdocumentper cent2F200808per cent2Fleyla.karimli.pdfper cent26letoltesper cent3D1&ei=a4KkVPi9HIafPeu_gPgE&usg=AFQjCNGo5snY45Aqr4C5e2Z4Jp_MhA WdUQ&sig2=OFaE3FFhnP0BtF4mZsFbIw

Keck, C. W., & Reed, G. A. (2012). The curious case of Cuba. *American Journal of Public Health*, 102(8), e13-e22.

Kolstad, I., & Wiig, A. (2009). Is transparency the key to reducing corruption in resource-rich countries? *World Development*, 37(3), 521-532.

Krueger, A. O. (1974). The political economy of the rent-seeking society. *The American economic review,* 64(3), 291-303.

Kudamatsu, M. (2012). Has democratization reduced infant mortality in sub-Saharan Africa? Evidence from micro data. *Journal of the European Economic Association*, 10(6), 1294–1317. https://doi.org/10.1111/j.1542-4774.2012.01092.x

Kumssa, A., & Mbeche, I. M. (2004). The role of institutions in the development process of
African countries. International Journal of Social Economics, 31(9),, 840–854.
https://doi.org/10.1108/03068290410550638

Kurukulasuriya, S., & Engilbertsdóttir, S. (2012). A multidimensional approach to measuring
child poverty. Child Poverty and New Inequality: New Perspectives, Ed: Isabel Ortiz,
Louise Moreira Daniels and Sólrún Engilbertsdóttir, UNICEF, New York, 23-34.

Lane, P. R., & Tornell, A. (1996). Power, growth, and the voracity effect. *Journal of economic
growth,* 1(2), 213-241.

Lewis, M., & Pettersson, G. (2009). Governance in health care delivery: Raising performance.
The World Bank. https://documents.worldbank.org/en/publication/documents-
reports/documentdetail/792741468330936271/governance-in-health-care-delivery-
raising-performance

Leite, C., & Weidmann, J. (2002). Governance, Corruption, and Economic Performance.
Washington, DC: International Monetary Fund, Ch. Does Mother Nature Corrupt-Natural
Resources, Corruption, and Economic Growth.

Jawad, R. (2015). Social protection and social policy systems in the MENA region: Emerging
trends. Jawad, Rana, UNDESA, 19-20

Jensen, N., & Wantchekon, L. (2004). Resource wealth and political regimes in
Africa. *Comparative political studies,* 37(7), 816-841.

Jones, A.; LaLiberte, T.; and Piescher, K. (2015). Defining and strengthening child well-being in
child protection. *Children and Youth Services Review*. 54 (2015) 57–70.
http://dx.doi.org/10.1016/j.childyouth.2015.05.001

Mahdavy, Hossein. (1970). Patterns and Problems of Economic Development in Rentier States: the Case of Iran. in: Miles A. Cook (ed.) Studies in the Economic History of the Middle East from the Rise of Islam to the Present Day. New York: Oxford University Press

Makhlouf, Y., Kellard, N. M., & Vinogradov, D. (2017). Child mortality, commodity price volatility and the resource curse. *Social Science & Medicine*, 178, 144–156. https://doi.org/10.1016/j.socscimed.2017.01.063

Marmot, M., Friel, S., Bell, R., Houweling, T. A., Taylor, S., & Commission on Social Determinants of Health. (2008). Closing the gap in a generation: health equity through action on the social determinants of health. *The Lancet*, 372(9650), 1661–1669. https://doi.org/10.1016/S0140-6736(08)61690-6

Mauro, P., & Driscoll, D. D. (1997). Why worry about corruption? (Vol. 6, pp. 1-19). Washington, DC: International Monetary Fund.

Mehlum, H., Moene, K., & Torvik, R. (2002). Institutions and the resource curse.

McCullaugh, M. E. (2013). From well to welfare. Social spending in Mineral-rich post-Soviet States (Doctoral dissertation, University of California-Berkeley). http://digitalassets.lib.berkeley.edu/etd/ucb/text/McCullaugh_berkeley_0028E_13692.pdf

McCourt, W. (2003). Political commitment to reform: Civil service reform in Swaziland. *World Development,* 31(6), 1015-1031.

McGuire, J. W. (2013). Political regime and social performance. *Contemporary Politics*, 19(1), 55-75.

Murunga, V., Musila, N. R., Zulu, E. M., & Oronje, R. N. (2012). Africa on the Move! The Role of Political Will and Commitment in Improving Access to Family Planning in Africa.

Pineo, R. (2019). Cuban public healthcare: A model of success for developing nations. *Journal of Developing Societies*, 35(1), 16-61.

Minkkinen, J. (2013). The structural model of child well-being. *Child Indicators Research*, 6(3), 547-558.

Natural Resource Governance Institute. (2015). The 2013 resource governance index. https://resourcegovernanceindex.org

O'Hare, B., Makuta, I., Chiwaula, L., & Bar-Zeev, N. (2013). Income and child mortality in developing countries: a systematic review and meta-analysis. *Journal of the Royal Society of Medicine,* 106(10), 408-414.

Osborne, C., & Knab, J. (2007). Work, welfare, and young children's health and behavior in the Fragile Families and Child Well-being Study. *Children and Youth Services Review*, 29(6), 762–781.

Orihuela, C. J. (2012). How do "Mineral-States" Learn? Path-Dependence, Networks, and Policy Change in the Development of Economic Institutions. *World Development*, 43, pp. 138-148

Olken, B. A., & Pande, R. (2012). Corruption in developing countries. *Annual Rev. Econ.*, 4(1), 479-509.

Oxfam (2013). Evaluation of Extractive Industries Program in Cambodia 2009-2012. Retrieved from https://www.oxfamamerica.org/explore/research-publications/evaluation-of-the-extractive-program-in-cambodia-2009-2012/

Osborne, C., & Knab, J. (2007). Work, welfare, and young children's health and behavior in the Fragile Families and Child Well-being Study. *Children and Youth Services Review*, 29(6), 762-781.

Pindyck, R. S. (1993). Investments of uncertain cost. *Journal of Financial Economics*, *34*(1), 53-76.

Pieters, H., Curzi, D., Olper, A., & Swinnen, J. (2016). Effect of democratic reforms on child mortality: a synthetic control analysis. *The Lancet Global Health*, 4(9), e627–e632. https://doi.org/10.1016/S2214-109X(16)30104-8

Pollard, E. L., & Lee, P. D. (2003). 'Child Well-being: A Systematic Review of the Literature'. *Social Indicators Research*, 61, 1, 59-78.

Rodrik D. (1997). TFPG controversies, institutions and economic performance in East Asia. National Bureau of Economic Research Working Paper, No. 5914.

Rodrik D., Subramanian, A., & Trebbi, F. (2002). Institutions rule: The primacy of institutions over integration and geography in economic development (IMF Working Paper, No. 189). https://www.imf.org/external/pubs/ft/wp/2002/wp02189.pdf

Ross, M. L. (2001). Does oil hinder democracy? *World politics*, *53*(3), 325-361.

Ross, M. L. (2012). The oil curse: how petroleum wealth shapes the development of nations. Princeton University Press.

Ross, M. L. (2012). *The oil curse*. Princeton University Press.

Rock, M. T., & Bonnett, H. (2004). The comparative politics of corruption: accounting for the East Asian paradox in empirical studies of corruption, growth and investment. *World Development*, 32(6), 999-1017.

Ruiz, M. I. A., & García-Peñalosa, C. (2008). Education, corruption and the natural resource curse. https://halshs.archives-ouvertes.fr/halshs-00340997/document

Rzayeva, S. (2013). Oil and health care in post-Soviet Azerbaijan. *European Journal of Sociology*/Archives Européennes de Sociologie/Europäisches Archiv für Soziologie, 33-63.

Sala-i-Martin, X., & Subramanian, A. (2008). Addressing the natural resource curse: An illustration from Nigeria. In Economic policy options for a prosperous Nigeria (pp. 61-92). Palgrave Macmillan, London.

Savedoff, W. D. (2011). Governance in the health sector: a strategy for measuring determinants and performance [Policy research working paper]. The World Bank. https://doi.org/10.1596/1813-9450-5655

De Soysa, I., & Gizelis, T. I. (2013). The natural resource curse and the spread of HIV/AIDS, 1990–2008. Social Science & Medicine, 77, 90-96.

Sachs, J. D., & Warner, A. M. (1995). Natural resource abundance and economic growth (No. w5398). National Bureau of Economic Research.

Sachs, J. D., & Warner, A. M. (2001). The curse of natural resources. *European Economic Review*, 45(4-6), 827-838

Sachs, J. D. (2005). Investing in development: A practical plan to achieve the Millennium Development Goals. CRC Press.

Sachs, J. D. (2012). From millennium development goals to sustainable development goals. *The Lancet,* 379(9832), 2206-2211.

Sachs, J. D. (2016). Geography, geopolitics, and policy in the performance of transition economies. *Economics of Transition*, 26(4), 841-849.

Samimi, A. J., & Abedini, M. (2012). Control of corruption and inflation tax: new evidence from selected developing countries. *Procedia-Social and Behavioral Sciences*, 62, 441-445.

Statham, J., & Chase, E. (2010). Childhood wellbeing: A brief overview. Loughborough:

    Childhood Wellbeing Research Centre. Retrieved on March 2022 from

    https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.453.9199&rep=rep1&type=pd

    f

Satti, S. L., Farooq, A., Loganathan, N., & Shahbaz, M. (2014). Empirical evidence on the

    resource curse hypothesis in oil abundant economy. Economic Modelling, 42, 421-429.

Save the Children (2003). Lifting the Resource Curse: Extractive industry, children, and

    governance. Retrieved from

    https://reliefweb.int/sites/reliefweb.int/files/resources/74A9739821EC309649256D4E000

    AFF36-scf-drc-17jun.pdf

Sigele. J. (2009). Governance Strategy to Remedy the Natural Resource Curse. International

    Social Science Journal, 57, 1, pp.45-55

Sovacool, B. K. (2010). The political economy of oil and gas in Southeast Asia: heading towards

    the natural resource curse? The Pacific Review, 23,2

Social Mobility and Child Poverty Commission. (2014). State of the nation 2014: Social mobility

    and child poverty in Great Britain, London: The Stationery Office, www.gov.

    uk/government/publications

Schües, C., & Rehmann-Sutter, C. (2013). The well-and unwell-being of a child. *Topoi*, 32(2),

    197-205.

Shleifer, A., & Vishny, R. W. (1993). Corruption. The quarterly journal of economics, 108(3),

    599-617.

Spencer, N., & Baldwin, N. (2005). Economic, cultural, and social contexts of neglect. In Child neglect: Practice issues for health and social care (pp. 26-42). Jessica Kingsley Publishers.

Stevenson, D. K., Wright, L. L., Lemons, J. A., Oh, W., Korones, S. B., Papile, L. A., ... & Verter, J. (1998). Very low birth weight outcomes of the national institute of child health and human development neonatal research network, January 1993 through December 1994. *American journal of obstetrics and gynecology*, 179(6), 1632-1639.

Stiglitz, J. (2007). What is the Role of the State? *Escaping the resource curse, 23.*

Szántó, Z., Susánszky, E., Berényi, Z., Sipos, F., & Murányi, I. (2016). Understanding well-being: Review of European literature 1995–2014. Journal of Social Research & Policy, 7(1), 57–75.

Tisdall, E. K. M. (2015). Children's rights and children's wellbeing: equivalent policy concepts?. *Journal of Social Policy*, 44(4), 807-823.

Torvik, R. (2002). Natural resources, rent-seeking and welfare. Journal of Development Economics, 67(2), 455–470.

Tornell, A., & Lane, P. R. (1999). The voracity effect. *American economic review*, 89(1), 22-46.

Tullock, G. (1998). The fundamentals of rent-seeking. *The Locke Luminary*, *1*(2), 93.

UNICEF. (1989). Convention on the Rights of the Child. Retrieved from https://www.unicef.org/child-rights-convention

UNICEF. (2005a). All rights for all children. UNICEF in Central and Eastern Europe and the Commonwealth of Independent States. http://www.unicef.org/publications/files/UNICEF_CEE-CIS.pdf

UNICEF (2005b). Child Poverty in Latin America. Retrieved from

    https://repositorio.cepal.org/bitstream/handle/11362/35976/1/challenges_n1_Sept2005_e

    n.pdf

UNICEF (2009). Assessment of Child Welfare Reform Process in Georgia: UNICEF Innocent

    Research Centre. Retrieved in February, 2013, from

    http://www.unicef.org/georgia/OPM_report_edited.pdf

UNICEF. (2012, November). Childcare reform in Georgia. Update on progress of ending the use

    of large institutional care for children. UNICEF Office Georgia.

    https://bettercarenetwork.org/sites/default/files/attachments/Child%20Care%20Reform%

    20in%20Georgia.pdf

UNICEF. (2014). The state of the world's children 2014 in numbers: Every child counts.

    https://data.unicef.org/resources/state-worlds-children-2014-numbers-every-child-counts/

UNICEF (2017). Progress for Children with Equity in the Middle East and North Africa.

    Retrieved from https://www.unicef.org/mena/media/861/file/MENA-ProgressReport-

    Feb17.pdf.pdf

 United Nations Research Institute for Social Development. (2014a). Financing social policy in

    mineral-rich contexts: Challenges and opportunities.

    http://www.unrisd.org/80256B3C005BCCF9/per cent28httpAuxPagesper

    cent29/D66D0265B0AE2C55C12577BD0050710F/$file/Hinojosa.pdf

United Nations Research Institute for Social Development. (2014b). Social policy and state

    revenues in mineral rich countries. http://www.unrisd.org/80256B3C005BCCF9/per

    cent28httpAuxPagespercent29/D66D0265B0AE2C55C12577BD0050710F/$file/Hinojos

    a.pdf

UNICEF (2011). A multidimensional approach to measuring child poverty. Social and Economic

    Working Briefs.

UNICEF (2017). Child Poverty in Europe and Central Asia. Retrieved from

    https://www.unicef.org/eca/media/3396/file

UNICEF (2018a). Malnutrition rates remain alarming: stunting is declining too slowly while

    wasting still impacts the lives of far too many young children. Retrieved from

    http://data.unicef.org/topic/nutrition/malnutrition/#.

UNICEF (2018). Child Marriage in Humanitarian Setting: Spotlight on the Situation in Arab

    World. Retrieved from https://www.unicef.org/mena/media/2651/file/MENA-

    ChildMarriageinHumanSettingsReport-July2018.pdf.pdf

UNICEF (2020). Children in Latin America and Caribbean. Retrieved from

    https://www.unicef.org/lac/media/21911/file/NNAinLAC2020-one-page.pdfUNESCO

    (2019). Fact Sheet. Retrieved from

    http://uis.unesco.org/sites/default/files/documents/new-methodology-shows-258-million-

    children-adolescents-and-youth-are-out-school.pdf

UN High Commissioner for Refugees (UNHCR). Guidelines on Assessing and Determining the

    Best Interests of the Child. November 2018, available at:

    https://www.refworld.org/docid/5c18d7254.html [accessed 30 January 2019]

Várdy, F. (2010). Institutional Traps.

Vicente, P. C. (2010). Does oil corrupt? Evidence from a natural experiment in West Africa.

    Journal of development Economics, 92(1), 28-38.

Waddington, H. (2004). Linking Economic Policy to Childhood Poverty: A review of the

   evidence on growth, trade reform and macroeconomic policy (Vol. 7). Childhood Poverty

   Research and Policy Centre.

Wadho. W. A. (2014). Education, rent-seeking and curse of natural resources. Economics and

   Politics, 26(1), 128–156. https://doi.org/10.1111/ecpo.12029

Wigley, S. (2017). The resource curse and child mortality, 1961–2011. *Social Science &*

   Medicine, 176, 142–148. https://doi.org/10.1016/j.socscimed.2017.01.038

Wigley, S., & Akkoyunlu-Wigley, A. (2017). The impact of democracy and media freedom on

   under-5 mortality, 1961–2011. *Social Science & Medicine,* 190, 237-246.

World Bank (2011). Resilience Equality and Opportunity: 2012-2022 Social Protection and

   Labour Strategy. Washington: World Bank. Available at:

   http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/280558-

   1274453001167/7089867- 1279223745454/7253917-

   1291314603217/SPL_Strategy_2012-22_FINAL.pdf

World Bank (2022). World Bank Country and Lending Groups. Retrieved from

   https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-

   and-lending-groups

World Health Organization. (2020a). UNICEF/WHO/The World Bank Group joint child

   malnutrition estimates: levels and trends in child malnutrition: key findings of the 2020

   edition.

World Health Organization. (2020b). Child Maltreatment. Fact Sheet. Retrieved on May 15,

   2020 from https://www.who.int/news-room/fact-sheets/detail/child-maltreatment

World Health Organization. (2020c). Children: Improving Survival and Well-being. Fact Sheet.

Retrieved on May15 15, 2020 from https://www.who.int/news-room/fact-

sheets/detail/children-reducing-mortality

World Health Organization (2022). Violence Against Children. Retrieved from

https://www.who.int/news-room/fact-sheets/detail/violence-against-children

Wiens, D., Poast, P., & Clark, W. R. (2014). The political resource curse: an empirical re-

evaluation. *Political Research Quarterly*, 67(4), 783-79

Chapter 2: The Resource Curse and Child Well-being in Six Post-Soviet Countries

2.1. Introduction

Six hundred million children around the world face marked social and economic risks to their well-being. About 90% of these children live in 155 developing countries, and nearly half of these (about 45% of all vulnerable children) live in 74 low-to-middle income (LMI) countries that are rich in natural resources, such as oil, gas, and minerals (Save the Children, 2019; UNICEF, 2017). These data on the vulnerability of children in resource-rich LMI countries raise both puzzlement and concern.

Turning to specific regions, limited data from the Persian/Arab Gulf oil and gas-rich countries show that not all children, especially children with special needs, children of ethnic, religious minorities, low-income families, and children of farmworkers, benefit from the excellent health care and education systems in these countries. Although education is compulsory and free in the Persian/Arab Gulf oil and gas-rich countries, informal payments are common, which low-income families typically cannot afford (UNICEF, 2017).

As a result, despite natural resource wealth, these Arab countries have a high number of children who live and/or work on the streets. Large residential childcare institutions and facilities, which have been proven to be detrimental to child development, are the main or leading child support services for orphans and children without parental care (UNICEF, 2017). These children are set up for hardship and failure. For example, the Arab countries, including oil and gas-rich countries, have large numbers of child marriages (under 18 years of age) due in large part to social and economic problems among low-income families (UNICEF, 2017).

In Djibouti, Iraq, Kuwait, Libya, Syria, and Yemen, which are rich in oil, gas, and minerals, child malnutrition rates were high, leading to a rate of stunting and underweight of at least 20%, and as much as 58% in Yemen in 2009. In total, about 11 million people are in danger of starving in the Middle East and North Africa, including 2.2 million children (UNICEF, 2021).

Similar conditions have been observed in resource-rich LMI countries in other parts of the world. According to UNICEF (2003), the number of children living in institutions or detention centers in Chile and Colombia is as high as 20,000 to 30,000. In Argentina, the province of Buenos Aires alone has more than 10,000 children institutionalized for reasons of protection. In Bolivia, the number of institutionalized children totals more than 15,000. Similarly in resource-rich Indonesia, Malaysia, Thailand, and Botswana, the circumstances of vulnerable children are devastating, with high numbers of children in large-scale orphanages or on the streets, and scarce services for children with disabilities (UNICEF, 2016).

Research on resource-rich LMI countries finds that they have more than sufficient resources to eliminate economic hardships and improve the well-being of children by providing effective child well-being policies and services (Oxfam, 2013; Save the Children, 2003; UNICEF, 2012; Wigley, 2017). But consistent with the pattern of the resource curse, improving the well-being of children is not high on the agenda of elites in resource-rich LMI countries. The resource curse, sometimes called the paradox of plenty, leads to regressive development despite an abundance of natural resources (Auty, 1993; Karl, 2007; Sachs & Warners, 1995; Sachs, 2012). The resource curse describes the disturbing fact that countries rich with oil, gas, and minerals show, on average, lower development outcomes than their resource-poor counterparts.

The resource curse occurs in a well-documented pattern. Research finds that access to abundance of natural resources prevents governments from prioritizing the needs of their people,

and instead overspending on priorities such as a large military, grand construction projects, and lavish displays and entertainment events (Collier, 2012; Soros, 2007).

However, few studies have extended the concept of resource curse to child-wellbeing. Karl (2007), who coined the phrase *paradox of plenty*, was one of the pioneer scholars in this area. She found that the greater the dependency of a country on natural resources, the greater the likelihood that children would die at birth, receive poor health care and nutrition, and experience inadequate education, compared to resource-poor countries. Sovacol (2010) found that in countries dependent on oil and minerals, both infant mortality and life expectancy at birth were worse than in countries at the same income levels but not dependent on oil or minerals.

The purpose of the current study is to extend research on the resource curse and child well-being, and to systematically test the link between them. Theory and evidence on the resource curse suggest that post-Soviet countries are an ideal platform to test the resource-curse theory (Franke et al., 2009; McCaullagh, 2013). Scholars have observed that the time after the collapse of communism in the former Soviet Union created a large natural experiment on social, economic, and political reforms (Franke et al., 2009; Campos & Horvath, 2012; McCaullagh, 2013).

Formerly a mostly homogenous group of nations in terms of institutions, 15 post-Soviet countries began to differ markedly from one another after market-oriented reforms were implemented. Horvath and Zeynalov (2014) studied the effect of natural resource abundance on economic performance in 15 post-Soviet countries during the 1996 to 2011 period and documented the resource curse. These researchers found that, while controlling for a wide range of economic, social, and political characteristics, natural resource exports crowded out the

manufacturing sector. This evidence foundation sets the stage for a more detailed and in-depth study to compare resource-rich and resource-poor post-Soviet countries.

For this study, six post-Soviet countries—Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Ukraine, and Moldova—were selected for deeper analysis. Among the six countries included in the current study, Azerbaijan, Kazakhstan, Ukraine are oil and gas-rich countries, whereas Georgia, Moldova, and Kyrgyzstan are resource-poor countries. This sample enables systematic comparison.

The study has employed a comparative multiple case study approach, with a mixed methods research design. The quantitative part of the research design has tested the relationship between the resource curse and child well-being in the six post-Soviet countries by using secondary data. The qualitative part of the study has aimed at finding out how and why the resource curse affects child well-being. I collected the qualitative data by undertaking intensive fieldwork in the six post-Soviet countries.

The next section of the paper briefly describes the resource curse and its effects in general in six post-Soviet countries. This is followed by methodology of the paper and the presentation of findings from both quantitative and qualitative analyses. The final section is devoted to the discussion and conclusion.

2.2. The Resource Curse in Post-Soviet Countries

As noted above, a rich body of research suggests the resource curse has adverse effects on economic, social, and political development. More precisely, despite natural wealth, resource-rich countries have poor economies, weak institutions, wide income gaps between the rich and poor, high inequality, less developed social protection systems (health, education, welfare,

employment, housing), high child mortality, history of civil wars as well as external conflicts, institutionalized corruption, nepotism, and high levels of political patronage (Auty, 1993; Collier, 2012; Franke, 2013; Humphreys, 2005; Karl, 2007; Madhavy, 1970; Melhum, 2002; Ross, 2001; Sachs, 1995; Siegel, 2007;). Politically, resource curse countries are mostly autocratic. About 70% of resource-rich countries, especially oil-rich countries, are autocratic, and 40% of all autocratic counties are oil-rich (Humphrey, 2005; Karl, 2007; Ross, 2001, 2011; Siegel, 2007; Soros, 2007; Torvik, 2012). Thus, resource abundance, authoritarian leadership, and regressive development are intercorrelated (Auty, 1993; Karl, 2007; Sachs & Warners, 1995; Kendall-Taylor, 2011).

More specifically, countries displaying the resource curse typically have severe human rights violations and limited or no freedom of speech and assembly (Karl, 2007; Soros, 2007). They are highly dependent on natural resource sectors, while other sectors of the economy are underdeveloped, and investment in education and other forms of human capital development remains low (Gylfasson, 2012; Hijonosa, 2012).

Resource-curse countries typically also demonstrate high levels of policy failure and weak governance. Although negative development patterns occur in some resource-poor countries as well, research affirms that negative development is more prevalent in countries that have resources (Ahmadov, 2013; Franke, 2013; Hasanov, 2013; Karimli, 2012; Karl, 2007).

2.2.1. Explanation of the resource curse

The major explanations of the resource curse come from the theories developed in political and economic sciences such as Dutch Disease, Rent-Seeking, Rentier State, and Institutions. According to these theories, natural resources are not bad things and theoretically,

nations that have them are supposed to be wealthier and more developed. It is not resources themselves but rents, net profits generated from resources are associated with negative growth. Rents from natural resources are easy earned money and appear without productive activities and are independent of other sectors of the economy and society. If they are not managed carefully, they can lead to the rise of the resource curse. An economic explanation, Dutch Disease, states that when resources are extracted, resource contracts are signed, and rents start coming to the country. A massive number of rents immediately leads to the rise in exchange price and crowds outs other sectors of the economy. This dynamic leads to massive migration of jobs from other sectors such as service, agriculture, non-tradeable, and other non-resource sectors to the resource sector. The migration of jobs to the resource sector leads to the decline or devastation of previously productive sectors and results in huge unemployment. It also weakens the economy, leads to inflation, and increases in prices of local produce. A windfall characteristic of the rents attracts all investment and attention, and the development of other sectors becomes less important. When other sectors of the economy are not functional, countries become heavily dependent on resource sectors which decreases productivity among institutions and citizens. It leads to the competition: everyone wants to get a piece of cake. The politicians try to stay in power as much as they can and use all means, sometimes violent, for an easy appropriation of the resource rents. Plus, rulers of the resource-rich developing countries use patronage to extend their legacy. It leads to autocracy, corruption, and nepotism.

Political explanation which encompasses Rentier State, Rent Seeking, and Institutions theories, states that the resource curse happens when countries do not have strong institutions (Melhum, 2002; Karl, 2007; Acemoglu, 2007; Tovrik, 2010). Strong and quality institutions play a role of check and balance and prevent political and economic elites to have full access to

resource rents. In the institutional explanation of the resource curse, two approaches are debated: the history of the resource-rich countries (Acemoglu, 2007; Collier, 2012) and the geographical location of the resource-rich countries (Auty, 2007). The historical approach of the institutional explanation states that countries that suffer from weak institutions either were colonized (in the case of African and Asian countries) or were victims of imperialism (in the case of post-Soviet states). Due to these reasons, they did not have a chance to develop their institutions. The geographical explanation states that countries, which are victims of the resource curse, are located far from societies that have strong democracies and open markets. Thus, they easily fall in the trap of the resource curse loop.

2.2.2. Resource curse in post-Soviet countries

All of the post-Soviet states that are oil, gas, and mineral-rich—including Russia, Ukraine, Azerbaijan, Turkmenistan, Kazakhstan, and Uzbekistan—can be categorized as countries that face the resource curse (Hasanov, 2005; Humphreys, 2007; Esanov et al., 2009; Karimli, 2012; Franke, 2013; McCaullaugh, 2013; Kalyoncu et al., 2013). In these countries, resource revenues constitute from 65% to 80% of the GDP. More than 40% of exports come from natural resources or products from natural resources. All six of these post-Soviet nations are classified as autocratic and highly corrupted, with limited transparency and weak institutions. Regarding social development, there have high levels of poverty, high rates of child mortality, high prevalence of human rights violations, and weak employment opportunities outside the resource sector (Esanov et al., 2009; Franke, 2013; McCaullaugh, 2013; Natural Resource Governance Institute, 2015; Transparency International, 2016; World Bank, 2016).

Four of the six post-Soviet resource-curse countries have a history of wars and internal conflicts. Russia initiated an internal war with one of the autonomous Republic of Chechenya, which is rich in oil and natural gas. Azerbaijan engaged in the Nagorno-Karabagh war with Armenia, with a current ceasefire but everyday shooting on the front line. Uzbekistan struggled with internal conflicts at the beginning of the 1990s and external conflicts with Kyrgyzstan in the late 2000s. And Russia has been at war with Ukraine since 2014, with Russia invading Ukraine for territorial expansion as I write this in April and May of 2022.

Five of the six countries have autocratic regimes (all except Ukraine, which finally conducted a transparent democratic election in 2019). In addition, they have weak government and social institutions, suppression of opposition parties, corrupt courts, weak rule of law, and vertical and horizontal nepotism. In all five, power is concentrated in the hands of ruling families, political elites, and/or economic elites.

Kazakhstan, Uzbekistan, and Turkmenistan are classified as "accidental states" in resource curse studies (Franke, 2013). In Kazakhstan, the current president, and in Uzbekistan and Turkmenistan the ex-presidents, were secretaries of the Soviet Socialist Republics of Kazakhstan, Uzbekistan, and Turkmenistan. When the regime changed in these countries after the collapse of the Soviet Union in 1991, the Communist secretaries became "presidents" of supposedly democratic republics overnight, although no elections took place. Now all three countries are run by hybrid governments consisting of families and close friends, along with a few other elites (McCullough, 2013).

Azerbaijan experienced a democratic change after the collapse of the communist regime in 1991 (Franke et al., 2013; McCullough, 2013). The elected President of Azerbaijan in 1991, Ebulfez Elchibey, was anti-Russian and pro-Western. He did not transfer oil and gas resources to

Russia via resource contracts. However, the democratic government unraveled in 1993, when a former KGB official came to power. After his death in 2003, power transferred to his son, Ilham Aliyev, who has remained president into the present. Currently, the country is ruled by a small, close-knit circle, with power concentrated in hands of family, friends, and oligarchs (McCullough, 2013). Similarly, Russia is also categorized as an "oligarchic state" (Franke et al., 2013), wherein power is concentrated in the hands of political and economic elites rather than a family and friends (McCullough, 2013).

Turning to child well-being, among post-Soviet countries, resource-rich nations have unfortunately underperformed resource-poor countries in child mortality rates. For instance, resource-rich Azerbaijan recently ranked 68, Turkmenistan 52, Kazakhstan 70, and Ukraine 73, whereas resource-poor Georgia ranked 95, Moldova 100, Kyrgyzstan 79, Armenia 112, and Belarus 161 (UNICEF, 2021), wherein the smaller number rankings represent higher child mortality.

The number of "social orphans" (with one or both parents living, but the child abandoned due to social or economic problems, see Global Child Advocates, 2019) plus biological orphans in post-Soviet resource-rich countries such as Kazakhstan, Turkmenistan, Russia, Azerbaijan, Uzbekistan, and Ukraine are higher than in post-Soviet resource-poor countries such as Armenia, Moldova, Belarus, Latvia, Lithuania, and Estonia. This is due to inefficient or absent child welfare policies and services in resource-rich countries (UNICEF, 2014). In contrast, the resource-poor Republic of Georgia has eliminated large residential childcare institutions and replaced them with alternative services that meet global standards for the well-being of childcare (UNICEF, 2015).

In this study I have selected six countries among 15 post-Soviet countries, in contrasting pairs, to represent different geographical locations in the former Soviet Union. Azerbaijan and Georgia are located in the South Caucasus, Ukraine and Moldova are in Eastern Europe, and Kyrgyzstan and Kazakhstan are in Central Asia. Table 1 provides demographic and developmental information about six post-Soviet countries from 2019, when much of the qualitative study took place.

Table 16: Information on Six post-Soviet Countries in 2019

Countries	Population (million)	GDP (billion USD)	GDP per capita (USD)	Human Development Index	Adult literacy rate (%)	Life expectancy
Azerbaijan	10	48	4085	0.76	99	73
Georgia	3.7	17	4697	0.81	99	74
Kazakhstan	18	181	9120	0.83	99	73
Kyrgyzstan	6.5	9	1374	0.70	99	72
Ukraine	44	154	3662	0.78	99	72
Moldova	2	12	4494	0.75	99	72

According to the Freedom House (2019), Azerbaijan and Kazakhstan were not free countries in terms of democracy and political freedom in 2019. Georgia, Moldova, Kyrgyzstan, and Ukraine were partially free in terms of rights and freedoms enjoyed by individuals (Freedom House, 2019). In 2019, Azerbaijan (2.75) and Kazakhstan (2.94) ranked very low, Ukraine (5.90), Moldova (5.75), Georgia (5.42), and Kyrgyzstan (4.89) ranked as medium according to the Democracy Index by Economic Intelligence Unit (2019), where 1 indicates authoritarian and

10 indicates democratic in terms of electoral process, pluralism, civil liberties, functioning of government, political participation, and political culture.

For example, in size of the economy, Kazakhstan ranks highest among all six post-Soviet countries in the sample with USD 181 billion GDP (USD $9,120 GDP per capita). Kazakhstan's strategic Central Asia location links fast-growing markets in China and South Asia with those in Russia and Western Europe through railroads and one port in the Caspian Sea. As an upper-middle-income country, Kazakhstan's economy is categorized as fast-growing based on abundant oil, gas, and mineral resources, foreign direct investment, and strong domestic demand.

Taking another example, Ukraine is the second richest country among the six, with USD $154 billion in GDP. But GDP per capita was lower than other resource-rich countries at USD $3,662. Ukraine's economy is based on natural resources such as oil, gas, and coal, and agricultural production in wheat and sugar beets. It is the largest country in Eastern Europe and is characterized by a well-developed industrial base, highly trained labor, and rich farmlands.

2.3. Methods

2.3.1. Research Approach and Design

In this study I have adopted a multiple case study approach, which is useful for comparison when the sample size is small (Kumar, 2006; UNICEF, 2014). A multiple comparative case study consists of systematic comparison on two or more data points, with measures obtained through case study of both similar and different experiences (Kaaro & Baesley, 2006). This approach had three purposes: (a) to assess resource curse theory and child well-being, to see if more resource leads to less child well-being; (b) to specify how the resource

curse affects child well-being; and (c) to explain why the resource curse affects child-wellbeing. The study has used mixed-method, confirmatory, longitudinal, and cross-sectional research designs, working with both primary and secondary data. The quantitative data came from the World Bank, UNICEF, and UNESCO. I collected the qualitative data in systematic fieldwork in the six post-Soviet countries in the sample.

2.3.2. Variables and Measurement for Quantitative Data

Dependent Variables. The dependent variable for the study is an overall measure of child well-being, which I created by merging seven indices selected from the Child Rights Convention of the United Nations (CRC). To some extent, the study was constrained by the necessity of using the child well-being constructs available in these indices (see Table 2). The selected indices cover two large categories: survival of children and development of children. Survival has two dimensions, nutrition, and health. The health of children was measured by the three indices of neonatal, infant, and under-5 mortality rates. Neonatal, infant and under-five mortality rates were measured as numbers of deaths per 1,000 live births. I have converted rates into percentages for all three mortality rates: 0 being a high mortality rate 100 being a low mortality rate.

The nutrition status of children was measured by indices for being overweight and for stunting. Overweight and stunting rates were measured originally in percentages of children from 0 to 59 months who were above two standard deviations from the median weight-for-height of the WHO Child Growth Standards. These two variables were kept in their original versions.

The development dimension in my child well-being index was measured by pre-primary and primary school enrolment rates. These are presented as percentages of enrollment of children

in preprimary and primary schools: their range was from 0 for low enrollment to 100 for high enrollment.

Overall, for this analysis, all variables are increasing in the same direction: 0 being low child well-being and 100 being high child well-being. As a summary measure, all seven indices are collapsed into one variable by summing their means to create an omnibus child well-being variable. The theoretical range of my newly created child well-being variable is 0 low and 100 high, where *high represents better child well-being and low score represents bad child well-being.*

Table 17: Dimensions of the Dependent Variable in the Study

Category	Dimensions	Indices	CRC articles
Survival	Food, nutrition	Stunting and overweight rates	CRC Art. 24
	Health	Infant, neonatal and under-5 mortality	CRC Art. 24
Development	Education	Preprimary and primary education enrollment rates	CRC Art. 28

Independent Variables. The independent construct for this study is the resource curse. Based on availability of quantitative data, this phenomenon was measured by oil rents (resource flows) per capita, control of corruption, government effectiveness, democracy, political stability, absence of political violence and terrorism, and per capita income (see Table 2). The independent variables were divided into three groups: natural resource variables, political variables, and economic variables. During data analysis, these were entered in blocks: first oil rents per capita, then political variables, and then economic variables were entered into the models.

Data for all independent variables were obtained from World Bank and Transparency International open datasets. The World Bank data for control of corruption, government effectiveness, democracy, and political stability were available from 2002 up to 2020. Thus, the study entered data into models from 2002 through 2019. Due to Covid19, data for 2020 were excluded.

Table 18: Independent Variables

Independent variables	Data source
Natural resource	
Oil rents per capita	World Bank
Political factors	
Political stability & absence of violence/terrorism	World Bank
Control of corruption	World Bank
Government effectiveness	World Bank
Democracy	World Bank
Economic factor	
Poverty (per income capita)	World Bank

Oil rents per capita is the difference between the value of crude oil, gas, and mineral production at regional prices and total costs of production. Per capita income was used to measure the poverty dimension. Per capita income indicates economic growth of a country, and it is the economic variable for assessing the resource curse in this study.

Control of corruption, government effectiveness, democracy, and political stability are the political factors used to assess the resource curse. Control of corruption refers to perceptions

of public power exercised for private gain, including both petty and grand forms of corruption, and capture of the state by elites and private interests. Government effectiveness is perceptions of quality of public services, quality of the civil service, degree of its independence from political pressures, quality of policy formulation and implementation, and credibility of the government's commitment to such policies.

The democracy variable is measured by voice and accountability, measured by perceptions of the extent to which citizens can participate in selecting their government, as well as freedom of expression, freedom of association, and free media. Political stability and absence of violence/terrorism variable is measured by perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism. All four variables are based on Worldwide Governance Indicators, which were produced by Daniel Kaufman and Aart Kraay. All political variables were measured by the percentile ranking of countries, ranging from 0 (lowest) to 100 (highest).

2.3.3.   Dataset and Data Management

To test the first aim of the study, which was to apply the resource curse theory to child well-being in six post-Soviet countries, a special dataset was created. Data for different variables was extracted from different resources. Data for variables for child well-being come from UNICEF, UNESCO, and the World Bank. Data for the independent variables are from the World Bank and World Governance Indicators sources at the World Bank. After cleaning the raw data, all were merged into one dataset. The original dataset had 25 variables. Some variables had information for 50 years, since 1970. But some variables had information for only 19 years, since 2002. The original dataset was created in a wide format, and for this paper, the dataset was

restructured into a long format. Observations in the dataset were country and year. The initial dataset consisted of observations for 220 country-years. For this paper, covering only the six countries in the sample, the total observations (data points) are 108 country-years.

2.3.4. Sampling

Sampling for the Quantitative Study

As noted above, the study was conducted for six post-Soviet countries: three resource-poor and three resource-rich. These countries are Moldova, Kyrgyzstan, Georgia (resource-poor) and Azerbaijan, Ukraine, Kazakhstan (resource-rich). In total there were 108 observations/data points at different years across all six countries. These 108 country-year observations together constitute the sample for statistical analysis.

Sampling for the Qualitative Study

Supported by a dissertation research grant from the Center for Social Development at the Brown School, Washington University in St. Louis, I undertook intensive fieldwork, with on-site observation and qualitative interviews in all six countries. Using purposive and snowballing sampling techniques, 65 key informants in the child well-being field from the six countries were recruited for in-depth interviews: 10 in Georgia, 9 in Azerbaijan, 13 in Moldova, and 11 in Kazakhstan, 11 in Kyrgyzstan, and 10 in Ukraine. The composition of key informants included senior and middle-level government officials such as deputy ministers, heads of divisions in relevant ministries; representatives of local and international nonprofit and grass-roots organizations, universities, donor organizations, UNICEF; and independent experts. Interviews took place between October, 2019 and March, 2020.

Recruiting Participants

Recruitment of participants for the qualitative portion of the study was assisted by the UNICEF Geneve office and the deputy representative of UNICEF in Kyrgyzstan, presidents of national social work associations in Moldova, Georgia, and Kazakhstan, and social workers in Azerbaijan, Kyrgyzstan. (As a founder of the national social work association in Azerbaijan, I had previously worked with all of the post-Soviet social work associations and had good relationships.)

Ethics

The Washington University Internal Review Board (IRB) reviewed the research project and approved the collection of primary data in the six countries. As the primary investigator for this research, I arranged reviewers in the six countries at the request of the IRB. After review and approval of the research design and the data collection tool, the IRB approved data collection in the six countries.

During data collection, I contacted the participants by phone or email to inform them of the purpose and objectives of the study. After the respondents' approval, the time and place for each interview were arranged. All interviews were conducted in a private setting with closed doors without the participation of a third party. To protect confidentiality, study participants' names and identifying information were not collected. With permission of the participants, interviews were recorded by the researcher. Participants were compensated $20 for their time in providing the interview. Data were stored in a confidential place, which only I had access to it. All interviews were analyzed together.

2.3.5.   Analyses

Quantitative Data Analysis

The study used a mixed-effects linear regression model to determine the relationship between the resource curse and child well-being in the six countries. Micro, balanced, and equally spaced panels were used for analyses. Based on the results of the VIF test below, with no values exceeding 10, no multicollinearity among independent variables was observed,

Table 19: Multicollinearity Test

Variable	VIF	1/VIF
Oil rent per capita	2.40	0.30
Control of corruption	1.84	0.54
Per capita income	1.05	0.95
Government effectiveness	2.49	0.40
Political stability & absence of violence/terrorism	1.70	0.60
Democracy	3.36	0.29

Based on the results of Breusch–Pagan/Cook–Weisberg and Whites tests for heteroskedasticity, data are not homoscedastic. Normality tests revealed that the data (see Table 5) were not normally distributed (see Tables 6 and 7). As the number of observations in the six countries is 108, which is over 50, the study proceeded with building random intercept and mixed-effects models.

Table 20: Breusch–Pagan/Cook–Weisberg test for heteroskedasticity and Cameron & Trivedi's decomposition of IM-test

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity	Cameron & Trivedi's decomposition of IM-test			
	Source	**chi2**	**df**	**p**
chi2(20) = 37.56	Heteroskedasticity	201.70	27	0.000
Prob > chi2 = 0.000	Skewness	48.23	6	0.000
	Kurtosis	27.26	1	0.000
	Total	277.18	34	0.000

Table 21: Skewness and Kurtosis Tests for Normality

Variable	Observations	Pr (skewness)	Pr (kurtosis)	Adj chi2(2)	Prob>chi2
Child well-being(residuals)	2,322	.00	.00	263	.00

Table 22: Shapiro-Wilk Test

Variable	Observations	W	V	Z	Prob>z
Child well-being	2,322	.96	53	10	.00

Models

After building a null model, four analysis models were built by adding predictors. The first random intercept model was built to check the association between one of the measures of the natural resource, the oil rents per capita, and child-wellbeing. The first model if found to have a predictive capacity ($p<0.05$, Chi=.04).

Table 23: Random Intercept Model 1 with Oil Rent Per Capita for 2002–2019

Random Effects	Coefficient	SE	z	P> |z|	CI (95%)
Oil per capita	-.27	.12	-2.1	0.04	-.09 -.47

Note. ($N = 108$ observation points (country-years))

The second intercept model estimated political factors such as the control of corruption, government effectiveness, democracy, political stability, and no violence/terrorism. The second model if found to have the predictive capacity ($p<0.05$, Chi=.01).

Table 24: Random Intercept Model 2 With Political Factors for 2002–2019

Random effects	Coefficient	SE	z	$P > |z|$	Conf. interval (95%)
Oil rents per capita	-.27	.16	2.1	.40	-01 -.50
Control of corruption	-.43	.08	-5.1	.00	-.60 -.26
Government effectiveness	-.21	.08	2.4	.01	-.04 -.36
Democracy	.24	.09	2.7	.07	.07 .41
Political Stability	-.00	.05	-.10	.92	-.03 - .03

Note. (N = 108 observation points (country-years))

The third random intercept model was built by adding the economic factor of the resource curse, and poverty which was measured by per capita income (GDP). The first model is found to have the predictive capacity ($p<0.05$, Chi=.00).

Table 25: Random Intercept Model 3 with Oil Rents Per Capita and Political and Economic Variables (2002–2018)

Random Effects	Coefficient	SE	z	$p > |z|$	CI (95%)
Oil rent per capita	-.27	.13	-2.3	.03	-.02 -.52
Control of corruption	.44	.08	5.2	.00	.60 .26
Government effectiveness	-.23	.09	-2.5	.01	-.05 -.40
Democracy	-.22	.09	-2.4	.01	-.07 -.41
Political Stability	.05	.05	1.05	.23	-.05 .15

| Per capita income | -.00 | .00 | -0.83 | .41 | -.00 .00 |

Note. (N = 108 observation points (country-years))

The fourth model was mixed-effects, which allowed all predictors—oil rents per capita,

political, and economic variables—to vary across years. The fourth model is found to have

predictive capacity ($p<0.05$, Chi=.01).

Table 26: Mixed-effects Model 4 with Natural Resource, Economic and Political Predictors
(2002–2019)

Mixed Effects	Coefficient	SE	z	$P > |z|$	CI (95%)
Oil per capita	-.43	.10	-4.2	.00	-.20 -.56
Control of Corruption	.41	.10	5.1	.00	.57 .25
Government Effectiveness	-.42	.09	-4.4	.00	-.23 -.61
Democracy	-.19	.08	-2.5	.01	-.04 -.35
Political Stability	-.05	.05	-1.8	.24	-.15 .04
Per capita income	.01	.00	1.9	.06	.00 .00

Note. (N = 108 observation points (country-years))

Based on the values of AIC and BIC, the final model, the mixed-effects linear regression

model is the summary model for this study (see Table 12).

Table 27: AIC and BIC values

Models	Df	AIC	BIC
Model 1	4	713	723
Model 2	8	694	715
Model 3	9	695	719
Model 4	9	723	744

2.4. Results of the Quantitative Study

2.4.1. Descriptive Statistics

After meeting all assumptions, the final model—the mixed-effects linear regression model with all predictors—was run to test the relationship between the resource curse and child well-being. Six independent variables were entered into the final model. Child well-being had 108 observations (data points), with a mean rate of 31. The average score for control of corruption had 108 observations with a mean percentage of 31 with high variability among groups (*SD* 15). Government effectiveness had a mean of 24. The political stability average ranking was 37. The average ranking of six countries in terms of democracy was 31, with high variation (*SD* 14). The mean of national income in six countries was $3625 USD.

Table 28: Descriptive statistics

Variable	N	M	*SD*	Min	Max
Child-wellbeing	108	31	7.65	11	44
Oil rents per capita	108	7.2	10.91	0	40
Control of corruption	108	31	15.02	6.4	58
Government Effectiveness	108	24	18.48	4.8	77
Political stability	108	37	14.80	14	77
Democracy	108	31	14.20	5.3	76
Per capita income	108	3625	2979	14.2	13890

2.4.2.   Findings of the Mixed-Effects Linear Regression

The mixed-effects linear regression model had 108 observations in six countries. Based on the results of this model, oil rents per capita, control of corruption, government effectiveness, and democracy were statistically significant. Changes in all four variables predicted the changes in child well-being over eighteen years. Control of corruption had a statistically significant positive association with child-wellbeing. A one percentage point increase in the control of corruption ranking of countries predicted a 41% increase in child well-being index, (b= .41, SE=.10, z=-5.11, p<.000). The finding implies that as control of corruption increased in six countries, child well-being improved.

Oil rents per capita, government effectiveness, and democracy had negative relationships with the child-wellbeing measure. A one unit increase in oil rents per capita resulted in a 43 percentage decrease in the child well-being index (b=(-.43_, SE=.10, z=(-4.2), p<.00). It meant that as oil rents per capita increased in resource-rich post-Soviet countries, child well-being declined. This finding of this research overlaps with the finding of the first paper which also found that as oil rents per capita increased, child well-being declined in all resource-rich LMI countries.

But at this point, two results of this study diverge from my hypotheses. A one percentage point increase in the ranking of the government effectiveness resulted in a 42% decrease in the child well-being index (b=(-.42), SE=0.09, z=(-4.5), p<.00) which indicates a worsening of child well-being. As government effectiveness increased in six countries, child well-being declined. Democracy also had a negative statistically significant relationship with the child well-being index. A one percentage point increase in democracy ranking predicted a 19% decrease in the child well-being index (b=(-.19), SE=.08, z=(-2.5), *p*<0.01). As countries performed better in the

democratic measured index, child well-being declined. These two findings of my research are the opposite of what resource curse theory suggests. I take this up for additional consideration in the discussion section.

2.5. Qualitative Data Analysis and Results

The thematic data analysis approach was used to analyze qualitative data. These primary data were collected by structured interviews. The interviews were conducted in Russian, Azerbaijani, and English. Interviews were recorded on voice recorders with original versions in voice format. All 65 interviews were transcribed by the researcher. The transcriptions were entered into the NVivo in their original languages. The quality of all interviews was controlled before entering them into the software for coding. The NVivo 20 qualitative data analysis software was used to analyze the data.

To analyze the data, I applied a data-comparison approach. The data were divided into two groups—data from resource-poor countries and data from resource-rich countries—to compare emerging patterns between the groups. First, the data coming from the resource-poor countries were analyzed. For this purpose, I familiarized myself with the data during the first round of coding. While reading the interviews, memos were noted, and initial codes were created. During the first cycle of the coding, the initial codes were generated to capture common patterns. Structural, descriptive, *in vivo*, process, motif, emotion, evaluation, hypothesis, values, holistic, and provisional types of coding were used to create codes.

After creating codes, a coding tree was developed, and data from the resource-poor countries were entered into NVivo software. The coding of the rest of the data was done by NVivo. After coding the data, categories were developed. Themes were generated based on the

categories. The researcher applied the same process to the data coming from resource-rich countries.

Themes were selected to answer the questions of *why* and *how* natural resource wealth affects the well-being of children in resource-rich countries. Before discussing the analysis for the study questions, the themes applicable to both groups are presented below.

Challenges for Both Groups of Countries in Child Well-Being

Issues applicable for both groups of countries are ineffective social welfare systems and incompetence of current decision-makers, policymakers, and administrators, in other words, government ineffectiveness in the social protection system, including child well-being policies and services.

The ineffective social welfare system. One of the themes—ineffective social welfare systems—emerged in the data coming from both groups of countries. All six countries faced the issue of a costly yet unproductive group-based social welfare system with inefficient allowances and aid. Respondents mentioned that social benefits and aid were not assigned based on the needs of people but on groupings, such as people with disabilities, veterans, internally displaced persons (IDPs), refugees, and single parents. According to the respondents, the group-based social welfare system was not an efficient way of using national revenues in a wise way. One of the respondents explained,

> *As you know pensions and other things that are inevitable. But I am sure that there are better schemes of social welfare than what we have now which would help us to save a lot of money and help to spend money in a better way. The pensions take a huge chunk of money, IDPs take a huge chunk of money. It is not needs based. Then people will get what they need just because they belong to certain groups. So, maybe it is a process and*

probably other developing countries had the same cases. I do not want to say that it is

wrong or right what we have now. But I am sure there are better social welfare schemes

that we have now.

In addition to being group based rather than needs based, the system consists of mostly passive social welfare measures for families and children. Respondents stated that the system mostly gives material benefits and assistance to groups of people who were recognized as vulnerable by the law. The number of preventive services to help families to get out of poverty or prevent social issues was almost low or nonexistant. According to the respondents, these kinds of social welfare systems created dependency were expensive. One of the respondents explained,

The government should focus on creating new social services instead of giving money to

people which would be much cheaper. Most of these services will prevent most of the

social problems that government gives cash money now. With social services, the

government can support families to earn their own money rather than being dependent

on cash assistance all the time. And hence he/she will not need cash money. So, the

government should focus on creating social services to support those people to end up in

those kinds of difficult situations. I do understand that it is not easy. They do not possess

that kind of capacity or resources to do it. But the process already started. It will take

some time of course.

The current social protection system in all post-Soviet countries was inherited from the Communists. During the rule of communism, policymakers built social protection system mostly around passive measures such as giving cash, house, cars, vouchers for leisure activities, and sanatoriums. They did not place much emphasis on preventive services to help vulnerable groups to be self-reliant and self-sufficient.

According to the data, another issue of the ineffective social welfare system in these countries was the inefficiency of allowances and assistance. The amounts assigned to beneficiaries were so small that their effect almost was negligible. Almost all benefits, including retirement pensions, social aids, cash assistance, and even universal allowances, were very small, according to research participants. One of the respondents explained,

They were thinking about my children in the first 3 years of childhood. They give money to mothers to raise children. I also got it, but it was so small that it was insane. It was hard enough to raise a child with this money.

The small pensions for people who retired were articulated as a problem in all six countries. Insufficient pensions and allowances constituted an additional burden for young families. In addition to taking care of their own children, young families also ought to support their own parents financially. One respondent explained,

They do have a pension that probably could not cover all their expenses. We as children cover their expenses. So, incentives besides the pension they receive especially in cold times of the year are not covered. They are supposed to live in poverty if they do not have other sources of help. For instance, my mother worked in the kindergarten all her life but because of health issues she stopped working and her pension now is $75 dollars per month. Could you imagine how one can live on this money? My father worked in government all his life and has a pension of $80 dollars per month now. So, overall, per family, they have about $150–$155 dollars per month. How can they live on it? During the winter, the heating bill is higher than their pension and how can they have a decent life? They live in the countryside, and they grow their own potatoes and use other food coming from the garden.

Government ineffectiveness in social welfare. The social welfare system also lacked competent people with the required skill sets and knowledge in social protection including child well-being. The respondents mentioned that the lack of professionals as a reason for the lack of proper and effective social protection policies and services. One of the respondents explained,

I think that if before the country's biggest problem was corruption, now I think that the biggest problem is lack of professionalism. I will not say shortage. There is no policy aimed at finding professional personnel. There is enough professional personnel in our country, but we know when people come to power, they choose their own unprofessional team, and often people who come with purely corrupt intentions also. So, it leads to unprofessionalism too. I think that the biggest topic for our country is unprofessionalism, starting from the highest positions.

According to respondents in all six countries, the incompetence of decision-makers and practitioners who are involved in the child well-being field is a huge to solve issues of children. All 65 respondents highlighted it as an issue. They mentioned that the lack of proper human resources hinders reforms in child well-being.

The government's capacity is relatively weak. On the national level, it is more and less ok but when it comes to the local level, the capacity is not there. We still do not have social workers in the place. When I say social workers, I refer to trained specialists. Now the government decided to allocate additional 956 social workers to municipalities to work with families, but it is more about the older Soviet style of engagement such as helping elderly people, people with disabilities with household chores. The government has a clear intention, vision, decision, and policy to allocate additional human resources. Then it will be challenged to improve their capacity of course to serve children. At the same

114

time, there are very clear case management policies, procedures and mechanisms established. But when it comes to the execution of these documents and mechanisms, the capacity is not there. What happens in the end, people who do not have the necessary qualifications must cover all these burdens without having the necessary skills and qualifications, knowledge, and resources to do that. So, they are responsible for all kinds of groups such as the elderly, minors, and people with disabilities to carry out all things for them without having the necessary skills and qualifications.

Country-Specific Problems

In addition to general problems, two groups of countries had specific issues unique to their situations that affected child well-being. In resource-poor countries, the following themes emerged describing issues that influenced the well-being of children: unstable governments and lack of political stability, lack of financial resources, high rate of external migration, strong civil society, and politically active citizens. In resource-rich countries problems such as child well-being reforms as "declarative" (on paper only), weak or absent implementation of promises, oppressed civil society and underresourced civil society, oppressed citizens, and punishable civic activism impeded and slowed down the reforms in child well-being. The paper discusses these findings in detail, starting first with findings from the resource-poor countries.

Unstable governments and lack of political stability. According to respondents the frequent change of the government in resource-poor countries was problematic, especially in realizing and completing reforms. When a new government comes to power, they change everyone, starting from the top decision-makers to implementers such as the heads of departments in relevant ministries. One of the respondents from one of the resource-poor countries explained,

115

There are two ways of development, one is an evaluation and another one is a revolution. This country has witnessed many revolutions. Armed clashes took place between two presidents last year. Probably you've heard about it. The ex-president was got arrested. He was the only president who served full time. He did the peaceful transfer of power to the new one. During the process of transitioning power to the new president, they got into conflict and there was armed conflict around his house, he was arrested, and he was taken to jail. All previous presidents before him were forced to step down by revolutions: now one is in Moscow and another one is in Minsk, Belarus. And there was a lady, and she was there only for half a year. By now we had enough of revolutions. We need evolution now. And in the process of evolution, with the technical, how-know, and financial expertise of the international donors, we should develop the system.

Frequent changes in governments and governance were an issue for the other two resource-poor countries too. The respondent from another resource-poor country described frequent changes in governance:

We only had free government this year. There are a lot of political things going on. We had several governments in just one year. For one year we had three governments: one was elected but dismissed, then another one came, and then the third one. Finally, we have the government now.

Due to frequent changes in the government, the reforms got interrupted in general and specifically in child well-being. In addition, the prioritization for government spending also changes with new governments. One of the respondents from a resource-poor country described it:

116

Another problem is that government changes quite frequently here. So, every time when a

new government comes, they need to develop government programs and prioritize areas.

And then whatever the previous government was doing, stops and does not go till the end.

All respondents from the resource-poor countries evaluated the frequent changes in

governance as a negative influence on child well-being. They highlighted the importance of

stability in governance and political stability to complete reforms in child well-being.

High rate of external migration and left-behind children. External migration became

one of the leading themes in the data for all resource-poor countries. People migrated in massive

numbers to relatively rich neighboring countries for work to support family members they left

behind. The remittances coming from migration were even recognized by the government

officials in one resource-poor country. The respondents mentioned that the rate of external

migration was so high that there was a risk for the demography of the countries. In terms of child

well-being, migration was a huge problem: parents who migrated to another country for a job left

their children behind, which created the issue of children of work-away parents (Fu & Zhu,

2020). Usually, children of work-away parents were left in the care of extended family members,

relatives, or neighbors who mostly maltreated and exploited children. The issue of maltreatment

of children of work-away parents by people who looked after them was recognized officially by

the governments of two resource-poor countries. One of the respondents mentioned:

Now with this problem of migration, the government realized that they need to have a

program that requires parents to leave their child/children with some official

representative. Because of what happened before that when parents left, they would ask a

neighbor to take care of the child and they would not have an official role to look after

them or make some decisions about the child.

Civic activism and child well-being. According to the respondents, a strong civil society and grass-roots organizations were behind the child well-being reform in resource-poor countries. All respondents in resource-poor countries mentioned that it was because of strong civil society, grass-roots organizations, and empowered citizens that child well-being was a priority for their governments. One of the respondents from a resource-poor country explained,

Local NGOs and the civil society sector pushing for reforms in child well-being in this country. And yes, they are successful. Despite all the financial problems, the civil society in this country is very successful and very strong. This is one of the best outcomes of donor investment in this country. The civil sector is pretty strong, and it has a very strong voice.

Respondents from resource-poor countries mentioned that local civil society was stronger than international organizations. The governments of the resource-poor countries consulted civil society when they needed some advice on child well-being issues, policies, and services. The governments of resource-poor countries consult these organizations in formulating and implementing policies and programs related to children.

The data revealed that civil society organizations in resource-poor countries were active and effective in advocating for children's rights and well-being. Another study participant described it:

Many civil society organizations and international organizations such as UNICEF are advocating for child well-being. Here in this country, local civil society is much stronger than international organizations.

The data also revealed that child well-being-related issues were at the center of attention in resource-poor countries. Civil society and citizens had the freedom to assemble and protest when needed. One of the representatives of a local nonprofit organization said,

Our alliance [the Alliance of NGOs for Child Rights] organized a march this year. Then we did a demonstration because one child died due to violence against the child at home. The same year, social workers also did some demonstrations related to child well-being.

Alliances of NGOs for Child Rights were established by World Vision and UNICEF in all post-Soviet and socialist countries. The purpose of this effort was to unite civil society organizations around child well-being issues. The study revealed that they were very active in all three resource-poor countries. Even during the time of the data collection in all three resource-poor countries, NGOs for Child Rights were holding their meetings. Depending on the number of civil society organizations in the country, the alliance could have up to 100 members. Members are organizations. All respondents mentioned NGOs for Child Rights as drivers of reforms in child well-being in resource-poor countries.

Whereas in resource-rich countries, although they existed, such organizations were not remembered by any respondents. Due to their long-time inactivity, the key informants of this study in the resource-rich countries even forgot about them. Compared to resource-poor countries, civil society in resource-rich countries was weak and fragile. One of the respondents from resource-rich countries described it:

In our country, civil society is very weak and only UNICEF can be named. There are a couple of organizations trying to do something, but their voice is rarely heard. Even UNICEF was not successful for many years. Now they have some chance to do something. Our organization is also a very big NGO as you know in the country. For

119

many years we had an advocacy position in the office. But it was my decision to cancel

this position. As there was no response or outcome from this advocacy position so we had

to cut it down and give its responsibilities to the program director. I do not see any other

civil society organization in the country which have the power to change something. I

would not say that they [civil society organizations] are successful.

Freedom of assembly was also banned in resource-rich countries. All respondents in two

resource-rich countries mentioned it was even dangerous to talk about protests and

demonstrations. One of the respondents in resource-rich countries said that people even could be

shot dead if they did public protests:

But because of our political system any suggestions even peaceful it is still banned. Even

rallies with a slogan for the children are not allowed. The government is afraid of its own

shadow. Today we have such a political system that it is impossible to assemble more

than three people. I am sure this regime will shoot people dead if people protest to ask

for food or some other basic needs.

If public protests, marches, and demonstrations were actively practiced in resource-poor

countries, social media was used by people in resource-rich countries as a means of raising

awareness about child well-being issues and demanding justice for child rights violations. One of

the respondents from a resource-rich country explained,

Only social media works in our country no public protests for us. If the problem is shared

on social media, it goes viral and it goes to the government's attention. And they [the

government officials] react and do something about it.

The respondents from resource-rich countries mentioned that if a death of a child was involved, then a campaign on social media could have an outcome but not always. One of the respondents gave an example of a recent case:

I think after this case, the campaign to end violence, especially the antibullying campaign to end violence, paid off. And that's why the Ministry of Education was interested in this safeguarding mechanism and anti-bullying mechanism.

Overall, the study's findings describe situations that are the opposite in resource-rich vs. resource-poor countries. Following are descriptions of issues related to child well-being in resource-rich countries.

Child well-being as a "declarative" priority. Most of the respondents in the resource-rich countries mentioned that child well-being looked like a priority in legislation and programs, but in reality, most of those written promises were not implemented. Although the respondents in both countries indicated the issue of "a declarative" priority, for the resource-rich countries child well-being was a more declarative priority compared to the resource-poor countries. One of the respondents mentioned,

If you get acquainted with the documents that are issued by the government on child well-being-everything are very beautifully written. According to these documents we seem to have children as a priority, but you need to judge by real life. In real life, child well-being is not a priority.

Weak or absent implementation of promises. Lack of implementation was a leading issue in resource-rich countries. In resource-poor countries, reforms were interrupted or stayed incomplete due to frequent changes in governments, whereas in resource-rich countries, reforms did not take place due to a lack of accountability and commitment to people by decision-makers. One of the respondents from resource-rich countries explained it as follows:

> *We have conventions and a good legislative framework for children. But they are all on paper, I mean children are protected on paper. But, if we talk friendly it's not working, all those documents and promises are not implemented.*

Weak and under-resourced civil society. Although civil society had a strong role in successful reforms in resource-poor countries, in resource-rich countries, although civil society organizations existed, they were so fragile, weak and underresourced that they were not remembered by any respondents. Due to their long-time inactivity, the key informants of this study in the resource-rich countries even forgot about them. Compared to resource-poor countries, civil society in resource-rich countries was weak and fragile. One of the respondents from resource-rich countries described it:

> *In our country, civil society is very weak and only UNICEF can be named. There are a couple of organizations trying to do something, but their voice is rarely heard. Even UNICEF was not successful for many years. Now they have some chance to do something. Our organization is also a very big NGO as you know in the country. For many years we had an advocacy position in the office. But it was my decision to cancel this position. As there was no response or outcome from this advocacy position so we had to cut it down and give its responsibilities to the program director. I do not see any other*

122

civil society organization in the country which have the power to change something. I

would not say that they [civil society organizations] are successful.

Freedom of assembly was also banned in resource-rich countries. All respondents in two resource-rich countries mentioned it was even dangerous to talk about protests and demonstrations. One of the respondents in resource-rich countries said that people even could be shot dead if they did public protests:

But because of our political system any suggestions even peaceful it is still banned. Even

rallies with a slogan for the children are not allowed. The government is afraid of its own

shadow. Today we have such a political system that it is impossible to assemble more

than three people. I am sure this regime will shoot people dead if people protest to ask

for food or some other basic needs.

If public protests, marches, and demonstrations were actively practiced in resource-poor countries, social media was used by people in resource-rich countries as a means of raising awareness about child well-being issues and demanding justice for child rights violations. One of the respondents from a resource-rich country explained,

Only social media works in our country no public protests for us. If the problem is shared

on social media, it goes viral and it goes to the government's attention. And they [the

government officials] react and do something about it.

The respondents from resource-rich countries mentioned that if a death of a child was involved, then a campaign on social media could have an outcome but not always. One of the respondents gave an example of a recent case:

I think after this case, the campaign to end violence, especially the antibullying campaign to end violence, paid off. And that's why the Ministry of Education was interested in this safeguarding mechanism and anti-bullying mechanism.

Factors Influencing Governments to Prioritize Child Well-Being

There was a difference between the two groups of countries in terms of factors that would influence governments to prioritize children and child well-being. In research-poor countries several factors played an important role in influencing governments in prioritizing child well-being and investing in policies and services: awareness-raising on child rights among policymakers, sensitizing policymakers, strengthening civil society, and empowering citizens. One of the respondents in a resource-poor country explained influential factors:

We need to know what works with them [policy makers] and then use those strategies. In this country, the government is afraid of people because [our] people are very furious. People can change things if they want. Thus, I think investing in people's understanding of child well-being's importance, can help. This work, of course, demands money, effort, and time. If you have all of those then you can invest in people and people's understanding, then it will work.

In resource-rich countries, the respondents mentioned outside pressure, increasing the capacity of people who are in power, and having professionals in decision-making positions as the ways to prioritize child well-being issues by governments. The respondents in resource-rich countries mentioned that as civil society was not strong and civic activism was punishable, the best strategy for making child well-being a priority was to pressure by powerful countries or financial institutions, which governments would listen to. One of the respondents mentioned:

In countries, if they do not care about people and people are oppressed and afraid of telling what they think, probably again something international would work. Some international organizations can push for changes. Some countries depend on the US. or Russia. Whatever works for that government we need to find that strategy. In some resource-rich countries, mass media works well. If it is scandal in mass media, everyone talks about it. If everyone talks about it, then it works. But in some countries, the mass media is also controlled by the government. I mean it is very difficult.

Another respondent from a resource-rich country also articulated their view:

Whoever works on these issues or pushes these issues forward, needs to work with the stakeholders such as ministers, heads of committees, members of the parliament, and so on so forth to help these kinds of problems happen. But again, there are no stakeholders who can push for this work. For example, if you want to make a law about medicine there are private medical companies that lobby and achieve results. But nobody wants to advocate for children because this is a social problem it is not a private problem. And the government should take care of it but no one unfortunately in the government pushing toward fixing the problem.

Priorities in the spending of the national wealth. Data revealed that the spending priorities of governments in resource-poor countries mostly included social protection and human development expenses compared to resource-rich countries. To the question "Where does your government spend mostly?", almost all respondents in resource-poor countries answered that their government mostly spent on social welfare, health care, education, and in fields that would result in human capital development such as information technology and finance sectors.

I mean compared to many other countries, our government mostly spends on the social

sector, health care. As far as education, they spend almost the same funds as much as

France…If you look at the budget in general, it is very socially oriented, including

health, education, and social protection. In health care, they also have a mandatory

health insurance fund that really facilitates access to free health care services.

Maternities in the country are free of charge. The budget is very social-oriented, but they

still have an input-based budget, and the result-based or output-based budgeting is not

applied.

One of the resource-poor countries was in a postwar situation and a large territory of the country was under occupation. Despite this fact, according to respondents, most of the government's spending was on social protection and social welfare. A respondent explained:

The largest chunk of the national budget goes to defense. Because we are the nation that

formerly had war. [Next] healthcare takes a big part of the budget. Now especially

healthcare became free with the new government. I think a lot of money goes there too.

And I think the next is education.

In contrast to resource-poor countries, according to the respondents, governments of resource-rich countries spent first on defense, then mostly on construction: two out of three resource-rich countries also were in postwar situations. In both, the full ceasefire was not achieved and there was fighting every day. One of the respondents from a resource-rich country explained:

If we consider the fact that our country is in a war situation country with a neighboring

country probably it's rational to spend so much on defense but when it comes to

infrastructure projects, I think that social spending should be more prioritized and should

126

have the biggest portion. Let's say more portion than infrastructure projects because

most of the oil money coming to the budget in recent years of course was spent on

infrastructure. But I think that it's high time to switch that spending to social spending

mainly to health care and education and other social spending let's say social protection.

But as you know our country was one of the countries which were spending the least

amount of money on social spending such as health care for example…Overall, to some

extent, I agree mainly with defense expenses, but I think that social spending should be

much more than the current amount.

The respondents mentioned that construction in resource-rich countries included building roads, frequent renovation of roads, "fancy" buildings, and capital infrastructure. Most of the respondents indicated dissatisfaction with a such way of spending the national wealth. One of them noted,

When I'm looking at the budget, I would say it's military, it's construction. It's partly the

construction of certain types of so-called "white elephant" projects, such as stadiums,

music halls, things that will not bring you income or benefits in the long run. But it's done

only for the sake of image building.

Prioritization of child well-being. In all three resource-poor countries, the prioritization of child well-being by the government stood out strongly. All the respondents from resource-poor countries agreed that child well-being was among the prioritized issues for their governments. The place of child well-being in the list of the prioritized issues for the country had been moving up and down based on new governments, but still it always was among the prioritized issues. In one of the resource-poor countries, child well-being among priority issues for the country was ranked 5 out of 10 by their government. According to the data, there is

127

obviously political will to improve child well-being starting at the top level of governance and running down to the implementation level in resource-poor countries. One of the respondents in a source-poor country observed:

If we look at the programs designed and coordinated, we can observe that child well-being is a priority. For instance, the vise-prime minister is very active in pushing the reforms in child well-being. Just one example since there was not enough physical infrastructure for kindergartens and she suggested using infrastructure which country had such as libraries. We [UNICEF] also supported this suggestion and now if we look at early childhood education, this alternative version is working. You do not need to build Soviet-style fully fleshed kindergartens with bedrooms where children can sleep. For instance, in rural areas children can go to these available infrastructures, libraries and educated early childhood specialists can work with them and with their parents. Due to these kinds of interventions, the early childhood education coverage doubled from 20% in 2014 to 40% in 2018. Then for example the government has recently approved communication for non-violent parenting that recognized that we need to work with parents and establish parenting centers. They are looking for ways to improve learning outcomes. Recently the government introduced an inclusive education program and started implementing it. Again, we see many things happening and it is a very good level of prioritizing. The president of the country joined the campaign against corporal punishment of children, and he declared that he supported it.

But the lack of resources (financial, human, and infrastructure) can be a barrier for policymakers to fully commit to increasing child well-being. Most of the respondents recognized

the lack of resources in resource-poor countries as an obstacle for policymakers to do more in the field of child well-being.

However, in resource-rich countries, almost 98% of respondents stated that child well-being was not a priority for their governments. According to them, the issues of children were not among the priority issues on the agenda of the senior policymakers.

As I said before it's so [no priority] as there is no proper child protection system in place. Then let's talk about health care. The mandatory health care system: They promised to have health insurance be in place from this year and children are going to be covered within this healthcare for free, but so far this promise has not been implemented yet. So, to some extent, it means that clearly the government starting to prioritize children, and so this is kind of some steps forward in that sense. If you talk about education, they are currently trying to do something within the education system, but we don't really know what's the capacity of the government in this field. Regarding the status of the violence against children: the situation is even worse, as nothing is happening in this field. Overall, we can say that it is (child well-being) not a priority.

2.6. Discussion

The purpose of the study has been to determine whether the resource curse has affected child well-being in resource-rich post-Soviet countries. The study has also aimed to illuminate how and why the resource curse affects child well-being, by using a mixed-methods and comparative research design. The quantitative part of the study consisted of analyses of secondary panel data from 2002 to 2019 with random and mixed-effects linear regression models. The qualitative part of the study involved the analysis of primary data coming from 65

129

interviews collected in six post-Soviet countries. Qualitative data analysis methods—thematic and content analysis—were employed to specify themes emerging from interviews.

Findings from both the quantitative and qualitative studies have revealed that the presence of natural resources is negatively associated with child well-being in resource-rich post-Soviet countries. Results of the quantitative study showed that the dimensions of the resource curse—oil rents per capita, control of corruption, government effectiveness, and democracy—were associated with child well-being. Oil rents per capita had a negative statistical relationship with child well-being. As oil rents per capita increased child well-being declined. Control of corruption had a positive relationship with child well-being. As control of corruption increased, child well-being also improved. These findings support the claims of the resource curse, which says that oil and corruption negatively affect general development in LMI resource-rich countries.

In the first paper, I extended this claim to child well-being and suggested hypotheses that oil resources and corruption negatively affect child well-being in resource-rich LMI countries. The findings of this paper from six post-Soviet countries support these two hypotheses: oil revenues and corruption affect child well-being negatively in resource-rich post-Soviet countries. These quantitative findings are also confirmed by the findings of the qualitative part of the study. The overall qualitative evidence is that the presence of oil revenues in resource-rich countries had a negative effect on child well-being. Respondents also described how the presence of corruption in the six post-Soviet countries which hurt child well-being policies and programs.

Findings such as the positive relationship between oil rents per capita and reduced child well-being overlap with the findings of the first paper, which showed that increases in oil rents per capita in 137 LMI countries worsened child well-being. The negative effect of oil wealth on

130

child well-being, found in both papers, is consistent with other studies. Wigley (2017) identified a causal channel through which petroleum wealth has a harmful effect on child health and found an association between oil income and the under-5 mortality rate. Other scholars of resource-rich countries have similarly indicated that, among other social problems, the resource curse is linked to unusually high rates of child mortality (Karl, 2005; Torvic, 2002 Wadho, 2014). For each 5-point increase in oil dependence, the under-5 mortality rate rose by 3.8 per 1000 (Karl, 2007, Sovacool, 2010).

Resource-rich countries studied in this paper also performed relatively poorly in child well-being, compared to resource-poor countries. For instance, oil- and gas-rich Azerbaijan (19) and Kazakhstan (13) performed worse than resource-poor Georgia (9.3) and Moldova (12) in 2019 in under-5 mortality rate (World Bank, 2022). Similar outcomes occurred in primary school enrolment rate among school-age children: in 2018 resource-poor Georgia (99%), Moldova (99.9%), and Kyrgyzstan (99%) performed better than resource-rich Azerbaijan (98%), Kazakhstan (88%), and Ukraine (92%) (World Bank, 2022). Looking at 2013[1] malnutrition rates, again resource-poor post-Soviet countries did better than resource-rich countries: for instance, in stunting rates resource-poor Georgia (9%) and Kyrgyzstan (12%) were ahead of oil-gas rich Azerbaijan (18%) (no data for Ukraine and Kazakhstan) (World Bank, 2022). This paradoxical development (despite being wealth poor, better performance in child well-being) is explained in resource curse studies as follows: Due to high corruption, nepotism, and wasteful usage of natural wealth revenues in resource-rich LMI countries, wealth stays in the hands of elites, does

---

[1] Data for all countries on stunting were available only for the year 2013. Still Kazakhstan and Ukraine did not provide any data. Not providing data to global organizations on some social development indicators including child well-being is common among resource-rich LMI countries to protect their image as a rich country. This tendency can also be observed among Persian Gulf oil-rich countries as no consistency in data on child well-being is an issue for them too.

not trickle down, and does not benefit the poorest households where child ill-health is more prevalent (Wigley, 2017).

In the current paper, I have found a positive relationship between reduced corruption and improved child well-being in post-Soviet countries. As control of corruption increased, child well-being improved by 41%. These findings are also consistent with data on corruption perceptions collected by Transparency International in six countries. According to the Transparency International Corruption Index, in 2022 three resource-rich countries ranked higher in corruption than the three resource-poor countries. Resource-rich Azerbaijan ranked 128/180, Ukraine 122/180, Kazakhstan 102/180 whereas resource-poor Georgia ranked 45/180, and Moldova 105/180. This finding was also supported by the qualitative data. Although all respondents from all countries indicated the existence of endemic corruption, for the resource-rich countries it was a huge problem that hindered reforms generally and child well-being specifically.

However, two other main findings in the quantitative data for this study pose a challenge to resource curse theory. These findings are that both democracy and government effectiveness had a positive and significant relationship with less adequate child well-being, i.e., in the six post-Soviet countries, as democracy increased child well-being declined. Similarly, as measured government effectiveness improved, child well-being declined. These findings are counter to the claims of resource curse theory, which posits that if resource-rich LMI countries had democracy and government effectiveness in place, they would have succeeded in reforms and positive development.

Moreover, these two findings were also supported by the findings of the qualitative data in my study. Both, the findings of qualitative and quantitative studies in this paper showed that

although resource-poor post-Soviet countries had democracy, child well-being did not improve. Indeed, this is perhaps the major finding and potential contribution of the study, rejecting the resource curse hypotheses on the positive influence of democracy and government effectiveness on social development. Yet what could possibly explain this result?

According to the results in the qualitative part of the study, actual democracy was weak, even though resource-poor countries were able to elect their presidents every 4 years. All respondents from all resource-poor countries expressed frustration about democratic processes in their countries, pointing to unstable governance and frequent changes of administration that occurred with democratic elections. The qualitative data revealed that when new leaders came to power, they replaced most of the important government positions, not only the top leaders (decision-makers) but also heads of departments (implementers) in the government agencies. The new people may or may not be qualified for the positions, and at best create bureaucratic instability. In this way, frequent changes in personnel interrupt positive reforms and institution building, including reforms for child well-being. Moreover, bureaucratic instability may also explain ineffectiveness in the governance of child well-being policies and services. As a result of frequent replacement of decision-making and administrative positions in the social protection system, including the child well-being system, policies and programs are interrupted and discussions are discontinued.

Respondents from resource-poor countries also mentioned frequently that they personally had invested in the capacity building of stakeholders in child well-being, but when they were ready to finally realize reforms, they were replaced with new personnel. Thus, it was necessary to re-start the capacity-building process from the beginning, with the newly appointed decision-

makers and implementers. This process impeded reforms in all sectors, including child well-being.

The results of the qualitative study also indicated that the democratization process in resource-poor countries was not finalized. Kyrgyzstan and Georgia succeeded in changing their centrally controlled governance regime, which had been left from the Soviet regime to parliamentary democracies through the 2003 Rose Revolution in Georgia and the 2011 Tulip Revolution in Kyrgyzstan. Moldova was also able to change the Soviet regime to parliamentary democracy. But parliamentary democracies in all three countries were not well developed and did not produce ideal results (Akmataliyeva, 2013). In resource-poor countries, the West, especially the European Union uses the "stick and carrot" mechanism to export its own model of democracy. The democratization process, policy reforms, and economic changes are conditions for receiving financial assistance from the West in all three countries. All these three countries are heavily dependent on external aid, and therefore engage in intensive dialogue with the West to become democratic. Thus, the democratization processes that arise in these countries are "imported" from the West, rather than naturally evolving (Akmataliyeva, 2013). Findings from the current study add to the question of how effective this democratization actually is "on the ground." And even if it appears to be effective, is it strong enough to generate and sustain social reforms, including reforms for child well-being?

Different from resource-poor countries, post-Soviet resource-rich countries can be categorized as electoral autocracies—although elections take place they are rigged. In one way or another, the same leaders get elected over 30 years. Dictators legitimize their presidency or leadership through fraudulent elections, sometimes using fearful methods. Many people depend directly on the current leaders for their livelihoods, so they do not challenge the elites in power.

In resource-rich countries, the portion of people who work for government agencies, which are financed by the national budget, is huge. They are frightened of losing their jobs and/or other income flow if they oppose the current leaders. Thus, during elections, most of these people have no option other than to publicly support and vote for the current leaders. When elections take place, the results are generally in favor of ruling dictators. At the end of the day, the same leaders stay in power, and nothing much changes or improves.

Different from resource-poor post-Soviet countries, Azerbaijan, Kazakhstan, and Ukraine do not depend heavily on external financial aid, due to their natural resource wealth. Thus, incentive-based dialogue between the West and these countries is not very effective in promoting becoming democratic and effective governance.

In addition, research on democracy and government effectiveness in post-Soviet countries has found another important factor, which claims that post-Soviet countries are still struggling with Russia, which is not democratic. Although the West accelerated the downfall of the USSR, it did not provide sufficient support to democratization processes in post-Soviet countries, which is still far from complete (Grauvogel & von Soest, 2015; Froltsov, 2005). These dynamics may also help explain an association between democracy and negative child well-being. Overall, democracy in post-Soviet countries does not play the same role in reforms and implementation of public policies as in other democracies. It is often a truncated and erratic democracy, which may not generate enough engagement and stability to have meaningful and lasting impacts on child well-being.

Turning to government ineffectiveness in resource-rich post-Soviet countries, due to the high level of corruption, people in decision-making, policymaking, and key administrative positions are appointed not necessarily based on their competencies or skills, and often based on

bribes, nepotism, and clan connections. Thus, the qualitative data on all six post-Soviet countries reveal a great deal about the ineffectiveness of governance in the form of incompetent decision-makers, policymakers, and policy implementers. In this context, although advocates and professionals may aim for reforms and development, government ineffectiveness may lead to reforms not being implemented properly. The ineffectiveness of government in all six post-Soviet countries is an important finding of the qualitative study: with or without natural resources all post-Soviet countries suffer from this issue.

Another problem, ineffective social protection frameworks which is an issue for all six post-Soviet countries, inherited from the Soviet period have been ineffective in helping those most in need of social assistance during the transition (UNDP, 2009). Only a few countries, mostly the Baltic States-Estonia, Lithuania, and Latvia- after the dissolution of the USSR, were able to put in place the institutions and policies to effectively design, implement, monitor, and measure inequality, poverty, and the welfare of citizens (McCullaugh, 2013).

Current social protection policies in post-Soviet states suffer from large gaps between desirable goals (e.g., universal and free access to quality health care, education, social benefit coverage, social services, and labor market protection) and feasibility in terms of capacities (especially demographics, financial resources, governance, and decision-making). Because these policies were previously handled by Moscow, the political and bureaucratic skill sets are weak or nonexistent. My fieldwork and the secondary quantitative data show that all post-Soviet countries struggle with the current ineffective social protection systems.

In this context, findings from the quantitative and qualitative study together revealed that *strong civil society and politically active citizens have been the main drivers of successful child well-being reforms in resource-poor countries.* For example, a strong civil society had a huge

role in successful reform in the deinstitutionalization of large-scale public child-care institutions in resource-poor Georgia, which eliminated almost all orphanages and replaced them with foster care, group homes, and adoptions.

But civil society and politically active citizens are more oppressed in resource-rich countries. This oppression affects child well-being negatively. These findings of weak civil society and oppressed citizens are consistent with the findings of studies in other resource-rich LMI countries. Due to natural resource wealth, resource-rich LMI countries are characterized by unaccountable politicians, higher rates of policy failure, and weak civil society (Karl, 2007; Kauffmann, 2016; Sachs, 2012, 2016; Soros, 2007; Wigley, 2017).

Regarding the prioritization of child well-being, my findings show that leaders of resource-poor countries performed better than leaders of resource-rich countries. According to the respondents, child well-being issues never were on the list of the top 10 issues for leaders of resource-rich post-Soviet countries. But the resource-poor country respondents mentioned child well-being issues being among the top five or six issues in their country for their leaders. All else equal, access to natural resource wealth creates a lower incentive for governments to invest in the welfare and capability of the people (Collier, 2016; Wigley, 2017).

To specify, studies on child health in LMI resource-rich countries have found that child health is poor because the formation of human capital is not a priority, due to an abundant supply of oil, gas, and mineral wealth (Karl, 2007; Wigley, 2017). Thus, LMI resource-rich countries have ineffective social welfare, housing, education policies and services, and high unemployment and poverty rates (Collier, 2016; Jawad, 2014; Karl, 2007). All these factors have led to problems such as physical malformation, malnutrition, sudden infant death syndrome,

maternal complications during pregnancy, accidents, and unintentional injuries, all of which contribute to child mortality.

The findings of this study make several contributions to resource-curse and child well-being research knowledge. The first contribution is enriching the evidence on the resource curse and child well-being in post-Soviet countries. Research in both areas is growing, but it is not as rich as in other parts of the world, because post-Soviet countries opened to the world just three decades ago. Generally, social science research, perhaps especially on child well-being and the resource curse, is limited. Thus, this study is a step toward filling this gap.

The second important contribution is the findings on the negative relationship between democracy, government effectiveness, and child well-being. This is different from other studies. My findings have rejected hypotheses and claims of the resource curse literature about positive relationships between democracy, government effectiveness, and child well-being, and suggest the need for theoretical specification, and perhaps even more so, better measurement of democracy and government effectiveness—taking into account instability and disruption in bureaucratic and professional roles. Resource curse literature needs to consider that democracy and government effectiveness does not have the same effect on the development in post-Soviet countries. As democracy is not organically developed in post-Soviet countries, its effect on development is small. Thus, the resource curse theory needs to have a side note about the type and role of democracy while discussing the importance of democracy in developing resource-rich countries. However, to refine and confirm these two findings which are opposite of the claims of the recourse curse on democracy and government effectiveness, further research is needed especially in post-Soviet countries.

Perhaps the study can also claim uniqueness in several ways. The first uniqueness is the methodology. Several quantitative studies have been conducted by scholars to study the relationship between resource curse and child well-being. But mixed methods have rarely been used to look at the same relationship. My findings that question some key aspects of resource curse theory may illustrate the value of more in-depth methods, embedded in context, in addition to quantitative analysis.

Another methodological uniqueness of the study is the child well-being index that I created for this paper to use as an outcome variable to measure the well-being of children in six countries. Previous studies on the relationship between resource curse and child well-being have looked at only the former's effect on under-5 mortality. My child well-being index encompasses under-5 mortality as one of seven indicators in addition to indicators on education and the nutritional situation of children.

My study also has several limitations. One limitation is the unavailability of data on all indicators of child well-being which are mentioned in the CRC of the United Nations. This limitation forced me to limit my child's well-being index only to health, nutrition, and education indicators. I was unable to measure other child well-being indicators in the six post-Soviet countries. Another limitation emerged with the Covid19 pandemic. Due to this global problem, I could not include quantitative data for 2020-2021 in my study. A third limitation was the tense political situation in one of the resource-rich countries. I could not get detailed information from all respondents on some questions which were politically sensitive for that context.

2.7. Conclusion

This study I hope opens a useful window onto resource-rich LMI countries and child well-being. Development is a long and irregular process, and this study illustrates dynamics and challenges in only one area—child well-being. Building new policies, services, and institutions takes time and concerted effort; it does not occur overnight; but it is fundamental. Focusing on children and creating opportunities for them could enable the six post-Soviet countries in this study to make better use of one of their most important resource—children to grow and contribute to equitable development and economic growth. Good governance begins by paying attention to the young citizens, who will become the future of the country.

2.8. References

Ahmadov, A. K. (2013). Oil, democracy, and context: A meta-analysis. *Comparative Political Studies, 47*(9), 1238-1267.

Altincekic, C. (2012). *The determinants of social expenditures in the Middle East: Oil, Taxes and Electoral Fraud* [Doctoral dissertation]. http://scholar.colorado.edu/cgi/viewcontent.cgi?article=1018&context=psci_gradetds

American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist, 70*, 832–864. https://doi.org/10.1037/a0039906

Anderson, O. L. (2011). Avoiding Dutch Disease and bad policy choices. *North Dakota Law Review, 87*: 475–

Ascher, W. (2011). Mineral Wealth, Development and Social Policy in Indonesia. Available online at: http://www.researchgate.net/publication/ 252922561_Mineral_Wealth_ Development_and_Social_Policy_in_Indonesia (accessed 5 December 2014)\

Auty, R., & Warhurst, A. (1993). Sustainable development in mineral exporting economies. *Resources Policy,* 19(1), 14-29.

Auty, R. M. (1997). Natural resource endowment, the state and development strategy. *Journal of International Development: The Journal of the Development Studies Association,* 9(4), 651-663.

Aynura, A. (2013). Color revolutions and parliamentary democracy in Georgia and Kyrgyzstan. Central Asia and the Caucasus, 14(2), 63-77.

141

Brahmbhatt, M., Canuto, O. & Vostroknutova, E. (2010). Dealing with Dutch disease. *World Bank, Economic Premise*. on October 01, 2015

Baland, J.-M., & Francois, P. (2000). Rent-seeking and resource booms. *Journal of Development Economics, 61*(2), 527–542.

Bjorvatn, K., & Selvik. (2007). Destructive competition: Functionalism and rent-seeking in Iran

Bresser-Pereire, L. C. (2008). The Dutch diseases and its neutralization: A Ricardian approach.

Campos, N. F., & Nugent, J. B. (1999). Development performance and the institutions of governance: evidence from East Asia and Latin America. *World Development*, 27(3), 439-452.

Choudhury, M. A., & Sahkawi-Al, A. M. (2000). Oil and non-oil sectors in Saudi Arabian economy. *Organization of Petroleum Exporting Countries.*

Cerami, A. (2009). Welfare State Developments in the Russian Federation: Oil-led Social Policy and 'The Russian Miracle'. *Social Policy Administration*, 43, 2, pp.105-120

Center for Oil Studies (2014). Transfers to State Budget Constitute 92per cent of Oil Funds Expenses. http://caspianbarrel.org/?p=21299

Collier, P., & Goderis, B. (2012). Commodity prices and growth: An empirical investigation. *European Economic Review,* 56(6), 1241-1260.

Cheibub, José Antonio; Gandhi, Jennifer; Vreeland, James Raymond (April 2010). Democracy and dictatorship revisited. *Public Choice*. 143 (1–2): 67–101

Esanov, A. (2009). Efficiency of public spending in resource-rich post-Soviet states. *Revenue Watch Institute* at https://resourcegovernance. org/sites/default/files/documents/rwi_esanov_efficiencyof publicspending.pdf

Economist, Intelligence Unit. (2019). *Democracy Index 2019.* https://www.in.gr/wp-

    content/uploads/2020/01/Democracy-Index-2019.pdf

Freedom House (2019). Freedom in the World.

    https://freedomhouse.org/sites/default/files/Feb2019_FH_FITW_2019_Report_ForWeb-

    compressed.pdf

Franke, A., Gawrich, A., & Alakbarov, G. (2009). Kazakhstan and Azerbaijan as post-Soviet

    rentier states: resource incomes and autocracy as a double 'curse'in post-Soviet regimes.

    Europe-Asia Studies, 61(1), 109-140.

Franke, A., Gawrich, A., & Alakbarov, G. (2009). Kazakhstan and Azerbaijan as post-Soviet

    rentier states: resource incomes and autocracy as a double 'curse'in post-Soviet

    regimes. *Europe-Asia Studies,* 61(1), 109-140.

Frankel, J. A. (2012). The natural resource curse: A survey of diagnoses and some prescriptions.

    Commodity price volatility and inclusive growth in low-income countries, 7-34

Froltsov, V. V. (2005). The post-soviet puzzle and western democracies. *Connections*, 4(4), 91-

    112.

Fu, L., & Zhu, Y. (1988). Are rural children of work-away parents really left behind? Voices

    from rural teachers. *Children and Youth Services Review, 117,* a105269

    https://doi.org/10.1016/j.childyouth.2020.105269

Fox, A. M., Goldberg, A. B., Gore, R. J., & Bärnighausen, T. (2011). Conceptual and

    methodological challenges to measuring political commitment to respond to HIV.

    Journal of the International AIDS society, 14(2), S5.

Fox, A. M., Balarajan, Y., Cheng, C., & Reich, M. R. (2014). Measuring political commitment

    and opportunities to advance food and nutrition security: piloting a rapid assessment tool.

    Health policy and Planning, *30*(5), 566–578.

Garwitch A., Melnykovska, I., and Schweickert, R. (2010). Paper to be presented at the

    workshop "Neopatrimonialism in Various World Regions" 23 August 2010, GIGA

    German Institute of Global and Area Studies, Hamburg

Gylfason, T. (2012). Development and growth in resource-dependent countries: Why social

    policy matters. In Mineral Rents and the Financing of Social Policy (pp. 26-61). Palgrave

    Macmillan, London.

Hasanov, F. (2013). Dutch Disease and Azerbaijan. *Communist and Post-Communist Studies*, 46,

    463–480

Hinojosa, L., Bebbington, A., & Barrientos, A. (2012). Social policy and state revenues in

    mineral-rich contexts. In Mineral Rents and the Financing of Social Policy (pp. 91-121).

    Palgrave Macmillan, London.

Hodler, R. (2006). The curse of natural resources in fractionalized countries. European *Economic*

    Review, 50(6), 1367–1386.

Horvath, R., & Zeynalov, A. (2016). Natural resources, manufacturing and institutions in post-

    Soviet countries. *Resources Policy*, 50, 141-148.

Hujo, K. (2012). Introduction and overview: blessing or Curse? Financing social Policies in

    Mineral-rich Countries. In Mineral rents and the financing of social policy (pp. 3-25).

    Palgrave Macmillan, London.

Humphreys, M. (2005). Natural resources, conflict, and conflict resolution: Uncovering the

    mechanisms. *Journal of conflict resolution*, 49(4), 508-537.

Humphreys, M., Sachs, J.D, and Stiglitz, J. E. (2007). *Escaping the Resource Curse.'* Columbia University Press. New York.

International Monetary Fund (2007). Guide on Resource Revenue Transparancy. http://www.imf.org/external/np/pp/2007/eng/101907g.pdf

Jawad, R. (2015). Social protection and social policy systems in the MENA region: Emerging trends. Jawad, Rana, UNDESA, 19-20

Karl, T. L. (2004). Oil-Led Development: Social, Political, and Economic Consequences. *In Encyclopedia of Energy, 661–672*

Karl, T.L. (2007). Ensuring Fairness: The Case for a Transparent Fiscal and Social Contract. In M. Humphreys, J.D. Sachs, and J.E.Stiglitz (Eds), *Escaping Resource Curse (pp. 256– 286).* Columbia University Press.

Karimli, L. (2007). Informed Citizen, Accountable Government and Effective Management of Oil Resources. http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CDIQFj AB&url=httpper cent3Aper cent2Fper cent2Fwww.policy.huper cent2Fdocumentper cent2F200808per cent2Fleyla.karimli.pdfper cent26letoltesper cent3D1&ei=a4KkVPi9HIafPeu_gPgE&usg=AFQjCNGo5snY45Aqr4C5e2Z4Jp_MhA WdUQ&sig2=OFaE3FFhnP0BtF4mZsFbIw

Kalyoncu, H., Gursoy, F. and Gocen, H. (2013). Causality Relationship between GDP and Energy Consumption in Georgia, Azerbaijan and Armenia. *International Journal of Energy Economics and Policy*,3,1,

Kendall-Taylor, A. (2011) Instability and Oil: How Political Time Horizons Affect Oil Revenue

    Management. *Studies in Comparative International Development, 46*,3, pp 321–348

Lambsdorff, J. G. (2007). The methodology of the corruption perceptions index 2007.

    Transparency International.

Mahdavy, H. (1970). ìPatterns and Problems of Economic Development in Rentier States: The

    Case of Iranî, in Cook, M.A. (ed.) *Studies in the economic history of the Middle-East*.

    Oxford University Press.

McCullaugh, M.E. (2013). From well to welfare. Social spending in Mineral-rich post-Soviet

    States (Doctoral dissertation).

    http://digitalassets.lib.berkeley.edu/etd/ucb/text/McCullaugh_berkeley_0028E_13692.pdf

Mehlum, H. (2002). Zimbabwe: Investments, credibility and the dynamics following trade

    liberalization: on the investment response during trade reform. *Economic*

    Modelling, 19(4), 565-584.

Mehlum, H., Moene, K., & Torvik, R. (2006). Institutions and the resource curse. *The economic*

    journal, 116(508), 1-20.

Natural Resource Governance Institute. (2015). *The 2013 resource governance index*.

    http://www.resourcegovernance.org/rgi/report#fig1

Orihuela, C. J. (2012). How do "mineral-states" learn? Path-dependence, networks, and policy

    change in the development of economic institutions. *World Development, 43,* 138–148.

Oxfam (2013). Evaluation of Extractive Industries Program in Cambodia 2009-2012.

    https://www.oxfamamerica.org/explore/research-publications/evaluation-of-the-

    extractive-program-in-cambodia-2009-2012/

Roccella, K. (2007). *The child protection system in Azerbaijan: Situation analysis: Resources,*

  referral mechanisms, gaps and risks seen from a child rights perspective.

  http://www.crin.org/bcn/details.asp?id=12813&themeID=1001&topicID=1010

Rojewski, J. W., Shapiro, M. S., & Shapiro, M. (2000). Parental assessment of behavior in

  Chinese adoptees during early childhood. *Child Psychiatry and Human Development,*

  31(1), 79–96.

Robersts, J. (2017). BP and Azerbaijan Extend the "Contract of the Century."

  http://www.visions.az/en/news/894/7a3d730d/

Ross, M. L. (2001). Does oil hinder democracy? *World politics*, *53*(3), 325-361.

Ross, M. L. (2012). The oil curse: how petroleum wealth shapes the development of nations.

  Princeton University Press.

Sachs, J. D., & Warner, A. M. (1995). Natural resource abundance and economic growth (No.

  w5398). National Bureau of Economic Research.

Sachs, J. D., & Warner, A. M. (2001). The curse of natural resources. *European Economic*

  Review, 45(4-6), 827-838

Sachs, J. D. (2012). From millennium development goals to sustainable development goals. *The*

  Lancet, 379(9832), 2206-2211.

Sachs, J. D. (2016). Geography, geopolitics, and policy in the performance of transition

  economies. *Economics of Transition*, 26(4), 841-849.

Save the Children (2003). Lifting the Resource Curse: Extractive industry, children, and

  governance.

https://reliefweb.int/sites/reliefweb.int/files/resources/74A9739821EC309649256D4E000

AFF36-scf-drc-17jun.pdf

Save the Children (2019). Change for Children: Annual Report.

https://www.savethechildren.org/content/dam/usa/reports/annual-report/annual-

report/annual-report-save-the-children-2019.pdfSaad-Fhilo, A., & Weeks, J. (2013).

Curses, diseases and other resource confusions. *The World Quarterly*, 34(1), 1–21

Sigel. J. (2007). Governance strategy to remedy the natural resource curse. *International Social

Science Journal, 57*(1), 45–55

Sofoh, H. H., & Abduallah, A. S. (2011). Exploring the most prevalent problems in the United

Arab Emirates. *International Journal of Academic Research, 3, 2*

Sovacool, B. K. (2010). The political economy of oil and gas in Southeast Asia: Heading

towards the natural resource curse? *The Pacific Review, 23,* 2.

Suarez, J. A. and et al. (2012). Energy, environment and development in Cuba. *Renewable and

Sustainable Energy Reviews, 16*, 2724–2731.

Tornell, A., & Lane, P. R. (1999). The voracity effect. *American Economic Review, 89*(1), 22–

46.

Torvik, R. (2012). Natural resources, rent-seeking and welfare. *Journal of Development

Economics, 67*(2), 455–470.

Schmidt, V. (2009). Orphan care in Russia. *Social Work and Society, 7(1), 58–69.*

Sotiropoulou, V., & Sotiropoulous, D. A. (2007). Child care in Post-Communist Welfare States:

The Case of Bulgaria. *Journal of Social Policy, 36*(1c), *141–155.*

Ssewamala, F., Ismayilova, L. & Huseynli., A. (2010). Reforming the Institutional Care in

Azerbaijan or Placing a Patch or Integrating Economic Strategies in De-

Institutionalisation of Children in Azerbaijan (unpublished paper)

Torvik, R. (2002). Natural resources, rent-seeking and welfare. *Journal of Development

Economics,* 67(2), 455–470.

Undp (2014). Azerbaijan in Human Development Index.

http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/AZE.pdf

Undp (2014). Human Development Report. Sustaining Human Progress: Reducing

Vulnerabilities and Building Resilience. https://unp.un.org/hdr/

UNICEF (2005). All rights for all children. UNICEF in Central and Eastern Europe and the

Commonwealth of Independent States.

http://www.unicef.org/publications/files/UNICEF_CEE-CIS.pdf

UNICEF (2007). The Child Protection System in Azerbaijan: Situation Analysis: Available

Resources, Referral Mechanisms, Gaps and Risks seen from a Child Rights Perspective.

www.unicef.org/azerbaijan/AZ_ChildProtection_map_report.doc

UNICEF IRC (2007). TransMonee 2007 Features: Data and analysis on the lives of children in

CEE/CIS and Baltic States. Florence, Italy: UNICEF Innocenti Research Centre (IRC)

and the UNICEF Regional Office for CEE/CIS.

UNICEF (2009). State of the World's Children 2009. New York: United Nations Children's

Fund [UNICEF].

UNICEF (2009). De-institutionalization and Alternative Care State Program, 2006–2015,

http://www.unicef.org/azerbaijan/protection_10026.html

UNICEF (2009). Assessment of 55 State Run Large-scale Institutions in Azerbaijan. Baku,

Azerbaijan UNICEF Country Office

UNICEF (2009). Assessment of Child Welfare Reform Process in Georgia: UNICEF Innocent

Research Centre. http://www.unicef.org/georgia/OPM_report_edited.pdf

UNICEF (2012). Child Care Reform in Georgia. Update on Progress of Ending the Use of Large

Institutional Care for Children. UNICEF office Georgia. on February, 2013 from

http://www.unicef.org/ceecis/Newsletter_Child_Care_eng_web.pdf

UNICEF. (2014). The state of the world's children 2014 in numbers: Every child counts.

https://data.unicef.org/resources/state-worlds-children-2014-numbers-every-child-counts/

UNICEF Innocenti Research Centre. (2012). Measuring Child Poverty: New league tables of

child well being the world's rich countries. Innocenti Report Card 10, UNICEF

Innocenti Research Centre, Florence.

UNICEF Office of Research (2013). Child Well-being in Rich Countries: A comparative

overview. Innocenti Report Card 11, UNICEF Office of Research, Florence

UNICEF (2014). The State of the World's Children 2014 in Numbers: Every Child Counts.

http://www.unicef.org/sowc2014/numbers/

UNICEF (2017). Progress for Children with Equity in the Middle East and North Africa.

https://www.unicef.org/mena/media/861/file/MENA-ProgressReport-Feb17.pdf

UNDP (2014). Converting Black Gold Into Human Gold. Using Oil Revenues To Achieve

Sustainable Development. http://www.az.undp.org/content/azerbaijan/en/home/library/

human_development/blackgold_humangold/

UNRISD (2014). Financing Social Policy in Mineral-rich Contexts: Challenges and

Opportunities. http://www.unrisd.org/80256B3C005BCCF9/per cent28httpAuxPagesper

cent29/D66D0265B0AE2C55C12577BD0050710F/$file/Hinojosa.pdf

UNRISD (2014). Social Policy and State Revenues in Mineral Rich Countries.

http://www.unrisd.org/80256B3C005BCCF9/per cent28httpAuxPagesper

cent29/D66D0265B0AE2C55C12577BD0050710F/$file/Hinojosa.pdf

UNICEF. (1989). Convention on the Rights of the Child.

te Lintelo, D. J., & Lakshman, R. W. (2015). Equate and conflate: political commitment to

hunger and undernutrition reduction in five high-burden countries. *World Development*,

76, 280–292.

UNICEF (2011). A multidimensional approach to measuring child poverty. Social and Economic

Working Briefs.

UNICEF (2017). Child Poverty in Europe and Central Asia.

https://www.unicef.org/eca/media/3396/file

UNICEF (2018a). Malnutrition rates remain alarming: stunting is declining too slowly while

wasting still impacts the lives of far too many young children.

http://data.unicef.org/topic/nutrition/malnutrition/#

UNICEF (2018). Child Marriage in Humanitarian Setting: Spotlight on the Situation in Arab

World. https://www.unicef.org/mena/media/2651/file/MENA-

ChildMarriageinHumanSettingsReport-July2018.pdf

UNICEF (2020). Children in Latin America and Caribbean.

https://www.unicef.org/lac/media/21911/file/NNAinLAC2020-one-page.pdfUNESCO

(2019). Fact Sheet.

Von Soest, C., & Grauvogel, J. (2015). How do non-democratic regimes claim legitimacy?

    Comparative insights from post-Soviet countries.

Who, W. A. (2014). Education, rent-seeking and curse of natural resources. *Economics and*

    *Politics, 26,*1

World Bank. (2015). *Country and lending groups.* http://data.worldbank.org/about/country-an

World Bank (2022). World Bank Country and Lending Groups.

    https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-

    and-lending-groups

Wigley, S. (2017). The resource curse and child mortality, 1961–2011. *Social Science &*

    Medicine, 176, 142–148. https://doi.org/10.1016/j.socscimed.2017.01.038

Chapter 3: Child Development Accounts in Oil and Gas-Rich Countries: Policy Design for Azerbaijan

3.1. Introduction

Lifting the resource curse can change the trajectory of the development of resource-rich low-to-middle income (LMI) countries and significantly contribute to achieving the Sustainable Development Goals of the United Nations (Humphreys et al., 2007). The resource curse, or paradox of plenty, indicates the failure of the resource-rich LMI countries to benefit from their natural resource wealth. Resource-rich LMI countries score low in economic, social, and human development and a large part of their population live in dire poverty (Acemoglu, 2012; Auty, 1995; Collier, 2012; Gelb, 1980; Gylfason, 2012; Karl, 2007; Ross, 2012; Sachs & Werner, 2001). The resource curse is consistent with institutionalized corruption and nepotism, autocratic forms of governance, massive human rights violations, civil strife, conflicts, and wars (Humpherys, 2005; Karl, 2007). Oil, minerals, and other resources offer the potential for development and simultaneously the potential for failure (Moss et al., 2015).

To prevent reverse development and avoid the mismanagement of natural resources, governments have established national reserve funds to save natural resource revenues for the future generations and allocate some of them for the well-being of citizens. Out of 62 countries with gas, oil, and mineral resources, 58 have established natural reserve funds (NRFs), only 11 of which have benefited citizens. Successful cases of NRFs come from Norway, Canada, Australia, Chile, the U.S., and some Persian/Arabian Gulf states (Fischer, 2007; Bauer &

Mihayli, 2018). Out of 58, 34 NRFs have failed to reach their goals and have been spent by corrupt political elites in wasteful ways (Natural Resource Governance Institute, 2015). Half of the existing NRFs in resource-rich LMI countries have been used by ruling regimes for their own personal luxury lifestyles or as slush funds and a means of patronage, nepotism, and corruption (Natural Resource Governance Institute, 2015). In addition to wasteful use of natural resource wealth, scholars have found several issues related to NRFs in resource-rich LMI countries such as mismanagement of funds by political and economic elites, corruption, lack of transparency, and saving for the future instead of meeting citizens' basic needs now (Collins, 20212; Torvik, 2018; Van de Ploeg & Venables, 2011).

The failure of NRFs to meet their purpose has prompted scholars to argue that direct distribution of natural resource revenues to the population would help resource-rich LMI countries escape the resource curse (IMF, 2014; Karl, 2007; Moss et al., 2015). Several ideas to deliver money from natural resources to vulnerable groups have been discussed by scholars, with arguments for using revenues from oil and gas resources for the welfare of citizens (Moss et al., 2015). One of the most popular ideas is cash transfers. Supporters of this idea claim that instead of citizens hoping that the government will fulfill its duties efficiently by turning oil and gas money into welfare policies and public services, the government can give a portion of the funds directly to citizens (Moss et al., 2015). Well-designed cash transfer initiatives that distribute cash directly to families can have huge development effects. The proponents of cash transfers assert that ordinary citizens have shown themselves able to use cash wisely more often than politicians, even those who have the public interest in mind.

The proponents of the direct distribution of oil and gas revenues offer two broad arguments. First, with direct distribution the state will no longer receive large windfalls of

resource wealth and will not seek to do too much too soon, which would prevent these governments from being administratively overextended and vulnerable to rent-seekers (Karl, 1997; Ross, 2001). Second, a direct distribution would generate incentives to increase accountability. Citizens would be more observant of the state's natural resource management given that their dividend is at stake. Moreover, deprived of large resource revenues, the governments would have to rely on the taxation of citizens to cover the cost of public services, which gives citizens more of a direct stake in how governments spend money. And if resource revenues were transferred to the population and then taxed, it would make citizens more aware of their rights as taxpayers, leading them to demand greater accountability for public spending programs (Birdsall & Subramanian, 2004; Devarajan et al., 2011; Sala-i-Martin & Subramanian, 2013). In this way, the direct distribution would help promote the development of political and economic institutions. This argument is supported by evidence that a large share of taxes in total revenues (especially direct taxes) is associated with more democratic institutions (Mahon 2005; Ross 2012).

In parallel to cash transfer strategies to general citizens, I also suggest individual financial asset accumulating interventions specifically focusing on vulnerable groups to create inclusivity, equality, and equity in the distribution of oil and gas revenues. Generally, asset accumulation is the key to breaking the intergenerational cycle of poverty and lifting poor families out of economic hardship (Sherraden, 1991). Asset accumulation such as monetary savings, homeownership, education, and income-generating skills changes people's capacities, behavior, and attitudes and enables them to make choices to pursue the kind of life they value (Robeyns, 2005; Sen, 1999; Sherraden, 1991; Ssewamala et al., 2010). Financial assets may enable the development of other cultural assets and social capital, resulting in household stability and

155

increased personal efficacy, and may provide a basis for the development of a future orientation, goals, and a foundation for risk-taking by providing a basic level of stability (Sherraden, 1991).

This paper focuses on children as one of the vulnerable groups. It suggests an evidence-based asset-accumulation policy for children through child development accounts (CDAs) linked to oil and gas revenues. Azerbaijan, an oil and gas-rich LMI country, was chosen as a case study for the suggested policy design. The elements of the policy are based on the findings of qualitative studies carried out in Azerbaijan in 2017, 2018, in six post-Soviet countries in 2019 and 2020. The paper also used 10 CDA design elements suggested by Sherraden et al. (2007), and the experiences of countries that have CDAs as national policy.

3.1.1.   Background

Why Distribute Oil and Gas Money to Citizens?

After the failure of Nauru, an island in the South Pacific, to benefit from its phosphate riches in the 1970s, governments started establishing NRFs to manage nonrenewable natural resources (Natural Resource Governance Institute, 2015). To prevent developmental failure and the resource curse, the main goals of the NRFs were to increase efficient usage, transparency, and public accountability in resource-rich LMI countries (Araji, 2018 et., al.; Gosling & Gambiza 2017; Kamiński, 2017; Mesagan, 2019). The theoretical rationale of NRFs was to save natural resource revenues for the future generations, overcome budget volatility, improve the well-being of citizens, reduce poverty, make smart investments within the country, protect oil and gas production from corruption, and escape the resource curse (Grafton & Little, 2017; Hossu et al., 2018; Hunziker & Lars-Erik, 2017; Natural Resource Governance Institute, 2015; Olawoye, 2018).

In addition, NRFs could play a role in stabilizing revenue, with the aim of preventing short-term fluctuations in government spending (Torvik, 2018). For instance, as a stabilization fund, the copper fund of Chile ensures that the government spends less than total revenues when copper prices are low and more when they are high. The establishment of NRFs has helped some countries, especially advanced nations, to avoid the resource curse—Norway, Finland, Chile, some states in the USA, and Persian/Arab Gulf states, whereas others have made the funds a haven for corruption and mismanagement, with no positive impact in the life of the citizens (Dupuy, 2017; Gale, 2019; Mendoza et al., 2015; Onifade, 2017)—Venezuela, Equatorial Guinea, Nigeria, Trinidad and Tobago, and post-Soviet countries (Adeleke & Zubariu, National Resource Governance Institute, 2015). Issues related to NRFs include mismanagement by political and economic elites, corruption, lack of transparency, and saving for the future instead of meeting citizens' basic needs now (Collins, 2016; Tovrik, 2018; van de Ploeg & Venables, 2011).

Mismanagement and Misappropriation of Funds in NRFs

When NRFs are established in countries with weak institutions, looting is inevitable (Torvik, 2018). In some countries, the funds are administered by the country's leaders, their children, or their relatives. For instance, in Angola the son of the president was appointed as the head of the fund's board of directors and the daughter was appointed as the head of the national oil company (Torvik, 2018). The heading of NRFs by presidents or their family members is also prevalent in oil and gas rich post-Soviet countries. Such experiences raise the question of whether the true objective or institutional arrangements of NRFs were set up to manage assets for society's well-being or protect the economic and political power of the current elite.

Scholars have argued that it is better not to have funds than have funds that are vulnerable to looting. For instance, in Nigeria, the fund held $30 billion, but in 2011 it had been emptied by politicians, with the most of withdrawals not accounted for (van de Ploeg & Venables, 2011). In countries such as Botswana, Zambia, Nigeria, Indonesia, Peru, Mongolia, Ghana, and South Sudan, governance of funds has been ineffective due to strong political pressure from various government arms to share the money and spend on short-term investments (Blomquist et al., 2010; Debrah, 2015 et., al.; Yorbana, 2017).

Better to Spend Now Instead of Saving for the Future

Because funds are often looted by elites in resource-rich LMI countries, some scholars have suggested spending revenue wealth for infrastructure, social protection, and economic growth instead of saving for the future. In addition, many resource-rich LMI countries are in desperate need of policies and services to meet the basic needs of their citizens (Collins, 2016). Investments in social protection and infrastructure in resource-rich LMI countries are harder to expropriate than fungible money. Such investments involve entrepreneurs in production and exclude rent-seekers, which could lead to mitigating the resource curse (Torvik, 2018). But investing in infrastructure and social protection requires careful guidelines and transparency measures to avoid "white elephants" such as entertainment facilities, music halls, bridges, and Olympic Games centers. as some resource-rich LMI countries have done (Collins, 2016; Robinson & Torvik, 2005).

Corruption and Lack of Transparency in NRFs

NRFs have not achieved their desired objectives, especially in Africa, the Middle East, and Latin America due to factors such as lack of transparency, lack of accountability, and corruption (Balding 2011; Cao et al., 2015; Ndikumana & Abderrahim, 2010; Ploeg, 2014; Triki

& Faye, 2011; Wiens 2015). One common characteristic of the successful models of NRFs is citizens' ability to hold governments accountable and transparent in spending the funds' money (Robinson & Torvik, 2005). But in most resource-rich LMI countries, NRFs are black boxes for citizens, who do not have any information about the management of finances.

Child Development Accounts as Alternative Option for Resource-Rich LMI countries

I suggest Child Development Accounts (CDAs) as a parallel strategy along with NRFs in resource-rich LMI countries. In parallel to saving natural wealth in macro accounts which are out of control and access of citizens, saving in individual accounts can lead the citizen to control accounts. Since the study focused on finding out ways to improve the well-being of children in resource-rich LMI countries to protect them from the effect of the resource curse, CDAs are the optimal intervention for this purpose.

CDAs are saving accounts specifically targeting children, started in the late 1980s to help families to fulfill life goals for their children such as postsecondary education, homeownership, business development, and retirement security (Huang et al., 2020). CDAs are based on the theory that accumulating household assets has positive outcomes for children (Clancy & Beverly, 2017; Elliott & Sherraden, 2013; Grinstein-Weiss et al., 2014). Starting asset accumulation in childhood, specifically through child saving accounts, improves overall and psychosocial well-being during childhood (Chowa et al., 2010; Ssewamala et al., 2009) and provides resources to promote productive and satisfying lives in adulthood (Friedline et al., 2013; Peng et al., 2007).

Starting asset accumulation in childhood, specifically through child saving accounts, improves the overall and psychosocial well-being of children (Chowa et al., 2010; Ssewamala et al., 2009) and provides resources for productive and satisfying lives in adulthood (Friedline et

al., 2013; Peng et al., 2007). Savings during childhood helps children learn about financial services and concepts (Johnson & Sherraden, 2007), which can positively impact their financial actions and behaviors in adulthood (Peng et al., 2007). When children and adolescents have access to savings accounts at early age, they are more likely to own savings accounts and have greater savings levels in young adulthood (Friedline et al., 2013).

The theory also holds that assets may shape the attitudes and behaviors of parents and children, including their interactions, in ways that promote positive educational outcomes (Sherraden 1991; see also Beverly et al., 2013; Grinstein-Weiss et al., 2014; Shanks et al. 2010). For example, having assets for children's postsecondary education may increase parents' educational expectations for their children (Kim et al. 2015), promote their own mental health (Huang et al., 2014), and improve both parenting practices and other parent-child interactions (Huang et al., 2019). These attitudes and behaviors contribute to healthy child development. Financial assets designated for postsecondary education may help children to develop a college-bound identity (Beverly et al., 2013), which in can lead turn to better academic performance and educational attainment. Elliott et al. (2013) also found that child savings accounts help families pay for postsecondary education and motivate young people to prepare for college. These factors may be especially powerful for disadvantaged families, who would not otherwise be able to consider higher education.

Savings also offer young people opportunities to learn about financial management (Hunag et al., 2015; Sherraden 1991). Children may benefit from savings and assets as early as age 12, and even earlier. Evidence from behavioral economics suggests that between the ages of 6 and 12, children begin to grasp the relationship between savings and future opportunity (Elliot et al., 2011). Adolescents in Uganda in the treatment group of a randomized controlled trial

experiment who had savings accounts saved significantly more per month compared with those in the control group in their experimental study with orphaned adolescents (Ssewamala & Ismayilova, 2009).

Child Development Account National Policies from Around the World

Since the late 1990s, Singapore, Canada, the U.K., Taiwan, South Korea, Israel, and several states in the U.S. have set up CDAs for children to reduce poverty and close the gap between rich and poor children. Most of these CDAs are universal, although some are targeted based on family income. In Israel the CDA policy is universal, but there is a risk of regressivity due to the specific design. In Canada, the UK (until its closure), and Singapore, the programs consist of a mixture of universal and means-tested elements, given the fact that low-income families often have less access to financial literacy and understanding. Canadian Education and Savings Grants (CESG) is a universal policy that encourages families, especially LMI families, to save for post-secondary education of children under Registered Education Saving Plans (RESP), established in 1972 (Henderson, 2019). CESG pays $500, with a lifetime maximum of $7,200 to everyone (Employment and Social Development of Canada, 2016). Through basic and additional CESGs, the program has paid $8.84B to 5.12M beneficiaries (Imbeau, 2015). In 2016, 51% of the children of Canada had RESP accounts, 36% were from LMI families, and 3.48 million children were up to the age of 17 years old. In 2015, about 1.95 million account owners had withdrawn savings to cover post-secondary education-related expenses in Canada and overseas (Parkin, 2016).

The U.K. started universal CDAs—child trust funds (CTF)—in 2002 and opened 6.5 million accounts through 2011. At birth, each child received a voucher worth £250. Between 2005 and 2011, £2 billion was held in the CTF accounts (Legislative Council Office, 2018). On

average, 86% of the families were rich and 58% were low-income (Zichawo et al., 2014). The CTF accounts program was stopped in 2011 as a part of an austerity agenda of the new government (Zichawo et al., 2014).

Singapore has established several saving accounts programs for children, such as MediSave, EduSave, Postsecondary Education Accounts (PASE), and CDAs, as a part of the Baby Bonus Scheme started in 2001 (Loke & Sherraden, 2015). The government contributes an initial S$3000 to a CDA and then matches the family's savings in the CDA 1:1 up to S$3000, for a maximum of S$6000 (Ministry of Social and Family Development of Singapore, 2019). Funds can be used to cover expenses for babycare, kindergarten, special education, early intervention programs, medical care, pharmaceuticals, assistive technology devices, eye care, and health insurance (Sherraden et al., 2018). Unused funds are transferred to EduSave for children from ages 6 to 17 and on to PASE when a child leaves secondary school (Loke, 2015; Sherraden et al., 2018). PSEA funds can be used to cover a child's own or their siblings' approved postsecondary education expenses and education programs in approved institutions (Singapore Ministry of Education, 2019). Unused money is deposited into the individual's Central Provident Fund accounts (Han & Chia, 2012; Singapore Ministry of Education, 2019).

A nationwide universal Saving for Every Child program in Israel was started in 2017 and currently enjoys 100% coverage due the combination of the family's choice to opt in and automatic default inclusion by the government for parents who neglected the choice for more than half a year (Grinstein-Weiss et al., 2019). When accounts are opened, $13.50 every month is paid into the account by the government. Parents may decide to match it with another $13.50 deducted from the monthly child allowance (Ministry of Finance of Israel, 2019). Parents can

162

choose to have the money deposited in one of several provident funds (*Kupot Gemel*) or in a bank account at authorized banks. The use of accumulated funds is unrestricted.

South Korea has two CSAs—Korean Child Development Accounts (KCDAs) established in 2007 and Seoul Hope Plus Accounts in 2009. As a national-level policy, Kpment Accounts (KCDAs) help low-income families to save for education, occupational training, housing, small business investment, health care, and marriage expenses (Zou & Sherraden, 2010). All children aged 0–17 from low-income families in the child welfare system, including children with disabilities in institutional care, are eligible for KCDAs, with 1:1 matching by the government and families. The government deposits $27 per account and expects families to match that amount (Zou & Sherraden, 2010). KCDAs are administered by the Korean Minister of Health and Welfare (Kim et al., 2011).

Seoul Hope Dream Accounts is a policy run at the city level by the Seoul Metropolitan Government and targets LMI families to encourage them to save for the education and vocational training expenses of their children (Li & Sherraden, 2010). Several states in the US have CSAs, and in Nebraska, Maine, Nevada, Connecticut, Massachusetts, Pennsylvania, Illinois, and California these accounts are fully universal (all newborns are included) with automatic enrollment (Center for Social Development, 2019; Sherraden, 2018; Washington University in St. Louis, 2019;). Cities such as St. Louis, Los Angeles, San Francisco, New York City, and Lansing (Michigan) have also implemented city-level CDAs.

The potential of CDAs for Oil and Gas-Rich Post-Soviet Countries and Framework for Policy Design

The findings of the fieldwork in six post-Soviet countries revealed the huge need for evidence-based, inclusive, equitable policies and services for children to provide the potential for

the development and prosperity of children. These findings revealed that the existing policies for children were ineffective due to their form, determination of eligibility of children, and the amount they provide for children. The findings also revealed that three countries out of six had enough wealth coming from oil, gas, and minerals to invest in policies such as CDAs. The findings from Azerbaijan found strong support by senior policymakers for launching CDAs as national policy in the coming years. Due to these factors, there is a huge potential for the diffusion of CDAs among resource-rich post-Soviet countries linked to oil and gas revenues.

Along with findings of qualitative study the paper used 10 key design elements as a guidance to suggest the CDA national policy for Azerbaijan. The 10 key design elements were informed by theory, research, and experience from individual development accounts (IDAs) and CDAs (Sherraden et al., 2018). All 10 design elements were tested modeled in the Saving for Education, Entrepreneurship, and Downpayment program in Oklahoma (SEED OK), which is an ongoing, longitudinal, multimethod, randomized experimental statewide universal CDA policy (Huang et a., 2021). SEED OK started in 2007 to demonstrate and test the policy idea of universal and progressive accounts from birth (Clancy & Beverly, 2007). The outcomes indicated that it was possible to implement universal and progressive CDAs automatically opened at birth, and seven states in the U.S. have adopted some version of this model (Huang et al, 2021).

Azerbaijan could design CDAs policy based on the 10 suggested key policy design elements, which are also selectively used by the countries with CDA national polices described above. These 10 elements are universal eligibility, automatic enrollment, starting at birth, automatic initial deposit, automatic progressive subsidy, a centralized savings plan, investment growth potential, targeted investment options, restricted withdrawals, and means-tested public

benefit exclusion (Sherraden et al., 2018). Elements such as universal eligibility, automatic enrollment, automatic initial deposit, and progressive subsidy are important factors to ensure equality and equity. The findings from existing CDA policies have revealed that without universal eligibility and automatic enrollment, children from low-income families will not have accounts.

3.2. Methods

3.2.1. Study design

This study was designed to explore the needs and resources for child development account national policy in Azerbaijan from the perspective of key informants such as senior policymakers, academicians, financial institutions, and local and international nonprofit organizations in the fields of social protection including child well-being. Primary data were collected through interviews of key informants. Secondary data came from archival records such as governmental reports, publications from national and international agencies, published research, and statistics from relevant government agencies.

Thirty-six key informants were selected based on a purposive sampling strategy. The main criteria for selection were being in senior decision-making position, deep understanding of policy-making process, and deep knowledge of social protection and child well-being systems in Azerbaijan (see Table 1).

Table 29: Key Informants

Key informant	Agency	*n*
Executive director	State Oil Fund of Azerbaijan Republic	1

Minister	Ministry of Labor and Social Protection of Azerbaijan	2
Deputy minister	Ministry of Labor and Social Protection of Azerbaijan and Ministry of International Affairs	4
Chair	State Committee on Family, Women and Child Affairs	1
Deputy chair	State Committee on Family, Women and Child Affairs	2
Head of office	State Committee on Family, Women and Child Affairs	1
Head of department	Ministry of Labor and Social Protection of Azerbaijan, Ministry of Economic Development & State Oil Fund of Azerbaijan Republic	7
Head of child protection Department	UNICEF	1
Evaluation and monitoring Specialist	UNICEF	1
Head of mission Director of programs	USAID	2
Program director	The World Bank	1
Member of parliament & chair of social policy committee	National Parliament of Azerbaijan Republic	1

Chair	Nonprofit organization	7
academicians	University	5
Total		**36**

Fourteen respondents were women and 22 were men. Three were ministers, and four were deputy ministers. One of the respondents was the executive director of the State Oil Fund of Azerbaijan Republic (SOFAZ) and two were head of departments at the fund. Seven of the respondents were head of departments at ministries, and a committee. Five were representatives of bilateral and financial institutions such as UNICEF, USAID, the World Bank, and seven were from nonprofit organizations. One of study participants was the member of the National Parliament of Azerbaijan. Five of the participants represented universities in Azerbaijan.

3.2.2.   Data Collection and Ethical Considerations

Data collection took place in Azerbaijan in November of 2017, and December of 2018, and in Kyrgyzstan, Kazakhstan, Ukraine, Moldova, Azerbaijan, and Georgia in 2019 and 2020. Meetings and interviews with key informants lasted 30–60 minutes. Information was recorded by a voice recorder and notes were taken in writing in notebooks. The data have been secured in a confidential place. The names of the respondents were not recorded to protect the privacy and anonymity of the respondents. The institutional review board at Washington University in St. Louis reviewed the research proposal and approved it.

3.2.3.   Analysis

I transcribed all the interviews, which were conducted in Azerbaijani, Russian, and English. The quality of the translation was cross-checked to ensure the accuracy of translations.

The quality of all interviews was controlled before entering them into the software for coding. The NVivo qualitative data analysis software was used to analyze the data.

A thematic analysis approach was used to analyze the interviews, meeting notes, and archival and secondary documents. I familiarized myself with the data during the first round of coding. While reading the interviews, memos were noted, and initial codes were created. During the second round of coding, codes were generated to capture common patterns. After creating codes, the coding tree was developed, and data were entered into the NVivo software. Coding of the whole data was done by NVivo. After coding the data categories were developed. Themes were generated based on categories. I selected themes relevant to the aim of this paper of determining needs and resources to suggest a CDAs national policy for Azerbaijan.

3.3. Findings

The following themes were selected for this paper: ineffective child well-being policies and services, need for universal policies and services, willingness to launch CDAs, declarative will to reform child well-being, the vision of the country leader for children, the wealth of the country, stability in the governance of the country, public acceptance of universal policies, availability of potential resources, using current financial resources, the lack of strong institutional base for administering and managing CDAs, lack of trust in private institutions among citizens, weak private financial institutions, and the limited number of asset management institutions/vehicles in Azerbaijan.

CDA Policy Design Suggestions for Azerbaijan

As findings of the qualitative study from six post-Soviet countries, including Azerbaijan, revealed that the existing child well-being policies and services for children were ineffective.

The ineffectiveness of the policies was characterized by three major problems that were relevant for this policy paper: the current form of child well-being policies and services; the small amount of assistance or aid; the determination of eligibility for the child well-being policies and services. The existing form of the policies and services for children consisted of mostly cash assistance. According to the respondents, these kinds of measures were not sustainable or effective for enhancing the well-being of children and they created dependency. According to the data, current policies and services for children focused on deficiency, illness and kept children in survival level.

The second problem with current policies and services for children related to their amount: cash alloences were small. According to the respondents, cash assistance and benefits were so small that they did not make any difference in the well-being of children. In their current form, the cash assistance a question about their necessity in child well-being.

The third major problem was the determination of eligibility for cash assistance and other benefits. According to the key informants, most child benefits, allowances, and services were not needs-based but category-based: children and families did not receive them because they needed them but because they belonged to certain categories. The general categories that existed in the child-well-being system during the data collection period in all six countries were: disability category, refugee, martyr's child (who died in patriotic wars), internally displaced person's child, and single parent's child. This kind of approach for assessing eligibility for services and allowances left out children who needed assistance but did not qualify for one of the categories. Thus, currently, the region needs child well-being policies and services need a new approach for the determination of eligibility of children for allowances and services. One way is also having universal coverage to cover all children.

Due to Soviet history, all six countries including Azerbaijan have a history of universal social policies and services. Thus people are generally open-minded to the idea of universalism. The data also confirmed it as it found the wide acceptance of universal policies for children by the senior policymakers in Azerbaijan. Based on the findings of the qualitative studies, best practices of national policies from around the world, and 10 key policy design elements in CDA policies, the following policy design for national the CDAs policy in Azerbaijan is suggested based.

Universal Eligibility

Universal design, as in Israel, Canada, Singapore, UK, and several states of the U.S (Sherraden et al., 2018), is recommended for Azerbaijan and would include every child who is a citizen of Azerbaijan. The findings of my study revealed that starting CDAs on a universal level in Azerbaijan is possible. All respondents of the study welcomed and supported the idea of universality. This design would make every family eligible to open an account for their child regardless of their income level. The country has experience with universal policies for the general population and for children based on its Soviet history. In fact, the literature indicates that in Azerbaijan universal social protection policies were effective in reducing the absolute poverty rate from 30.9% to 10.9 % in 2009, with a special positive impact of old-age and disability pensions (International Labor Organization, 2016). The universal child allowance policy of Azerbaijan was more effective in reducing poverty among children than other policies when it was active (Habibov & Fan, 2017).

Universal social policies for children are also laid out in Target 1.3 of the UN's (2015) Sustainable Development Goals to eradicate poverty and tend to increase social trust compared to means-tested policies (Kumlin & Rothshtein, 2005). They have fewer bureaucratic and

170

eligibility barriers (Cechini et al., 2015) and do not stigmatize beneficiaries, which results in high take-up rates (Lau & Chou, 2019). Universal policies have lower screening costs, fewer targeting errors such as inclusion and exclusion errors, less leakage to noneligibiles, and less undercoverage (Lau & Chou, 2019).

Unlike means-tested and selective policies, universal policies have no incentive mechanisms, structures, or social costs as people do not need to change their behavior such as avoiding employment to maintain eligibility (Gugushvili & Hirsch 2014; Lau & Chou, 2018) and bear lower administrative costs (Gugushvili & Hirsch, 2014). Despite high costs to the public due to universal inclusion, universal programs contribute to the reduction of poverty (Lau & Chou, 2018). The shift from universal to means-tested social policies in Poland, Hungary, and the Czech Republic contributed to increases in the prevalence of poverty (Gugushvili & Hirsch, 2014).

Universal programs are more effective and efficient in eliminating child poverty compared to means-tested programs, and they positively affect children from LMI families (International Labor Organization, 2017). Lau and Chou (2018) examined six universal and 38 means-tested policies in Hong Kong and found that the universal programs have a greater impact on poverty reduction, decreasing income inequality, and reaching poor households than means-tested programs.

Automatic Enrollment and Starting at Birth

Like the universal design, automatic enrollment ensures that all children have an account unless parents opt-out. A policy that automatically enrolls each newborn ensures that all children have accounts (Sherraden et al., 2018). Starting at birth has several positive effects. Starting earlier provides more time for more deposits from both government and parents/caregivers and

for interest payments. From the child's perspective, starting at birth is an important element that bonds to the purpose of the CDAs (Clancy & Beverly, 2007), as well it can also help children to learn to plan for the future and look forward to using their savings after maturation of the accounts.

Default opt-in enrollment substantially reduces participation, especially for disadvantaged children (Sherraden et al., 2018). Take-up rates in CDA policies in Canada (51%) and Singapore, which are universal but do not feature automatic enrollment, are lower than in Israel (100%), which automatically enrolls all children (Frenetti, 2017; Grinstein-Weiss et al., 2019). Azerbaijan is recommended to automatically enroll every child at birth and process the opening of CDAs when birth certificates are issued. Doing so would guarantee the enrollment of all children. For this purpose, Azerbaijan can look at the experience of Israel and the state of Maine in the U.S, which enroll every child automatically at birth. In Israel, accounts are automatically opened for every child at birth and thus include all children except some families who opt out due to religious beliefs (Grinstein-Weiss et al., 2019). The same holds for the statewide Harold Alfond College Challenge CDA in Maine, which automatically enrolls all newborns.

Automatic Initial Deposits

Initial deposits at the point of enrollment are essential for enabling disadvantaged families to save for their children. Children who receive sizable initial deposits early in life may accumulate meaningful assets regardless of their family's level of contribution. Initial deposits are a jump-start to asset accumulation, especially if they are held in saving vehicles with potential market growth. Initial deposits lead to full inclusion by covering every child, reinforcing saving behaviors and attitudes, motivating families to increase their savings, and

encouraging families to plan for the postsecondary education of their children (Sherraden et al., 2018). Findings from SEED OK demonstrated that automatic initial deposits in the amount of $1000 improved the social-emotional development of children coming from disadvantaged families (Clancy & Beverly, 2017). Automatic seed money was available for families in the UK when the policy was active (Prabhakar, 2010). Currently Singapore, Israel, and four states of the U.S.—Maine, Connecticut, Rhode Island, and Nevada—automatically give initial deposits when accounts are opened. The amount of initial deposit in the U.S. varies from $50 to $500 (Clancy & Beverly, 2017).

The qualitative study in Azerbaijan revealed that Azerbaijan does not need to allocate extra funding for automatic seed money for initial deposits. The country can use half of ₼100 manats ($60) of the existing ₼200 manats ($120) baby bonus, which is a one-time universal allowance issued to every newborn child (*Uşağın anadan olmasına görə birdəfəlik müavinət- One-time cash for the birth of a child*) (Ministry of Labor and Social Protection of Azerbaijan, 2019). However, families need to apply to get it and it is not automatically provided. During the interviews with key informants, I found out that many families do not apply for it. For instance, in 2017, out of 140,000 families with newborns, only 100,000 applied for and received the allowance. The respondents also mentioned that families spend their baby bonus mostly on family consumption rather than specifically on children's needs. Thus, saving half of the baby bonus in CDAs will contribute to serving children's well-being rather than consumption by families on family needs.

Automatic Progressive Subsidy Possibility

Azerbaijan is recommended to provide low-income families with additional seed money beyond that given to all families via extra monthly matching funds and/or a lifetime matching

cap that is twice the cap for higher income families. A progressive subsidy is additional money given to low-income families in addition to universal basic or general money. Providing an automatic progressive subsidy for low-income families is very important for CDA policies. Whatever form it takes, the progressive subsidy is a key policy concept for CDAs (Sherraden et al., 2018). If in addition to general basic initial or ongoing deposits additional money to low incomes families is not provided, they will have much fewer savings than middle and upper-middle-income families (Clancy & Beverly, 2017).

Many low-income families struggle to save for long-term goals because the majority—nearly all in many cases—of their income goes toward meeting their basic needs (Sherraden et al., 2018). Thus, a national CDA policy that facilitated saving by rich families without enabling poor families to accumulate assets would only increase the wealth gap and inequality. Currently, automatic progressive subsidies are implemented in CDAs in SEED OK and in 529 college savings plans in Louisiana (Sherraden et al., 2018); Canada, and Singapore. The U.K used to provide it too when the policy was active. In Canada in addition to Basic Canada Education Savings Grant, Additional Canada Education Savings Grant (A-CESG) and Canadian Learning Bond are available for low-income families (Employment and Social Development of Canada, 2015). A-CESG gives an additional 10% or 20% for a total of an extra 30 or 40 cents on each dollar of the first $500 contributed to a RESP based on the family's income. The Canadian Learning Bond gives an additional $500 to low-income families when they open saving accounts and $100 for each year, they remain eligible (Employment and Social Development of Canada, 2016).

In addition to national policies, the provincial governments of Canada give additional money to their residents to help families to save. British Columbia provides its residents with

174

Education and Training Savings Grants in the amount of $905 in a one-time deposit in addition to all national grants. Saskatchewan province has Advantage Grant for Education Savings that provides an additional $189 per year (Canada Revenue Agency, 2019). Quebec Education Savings Incentive gives up to $189 per year, 10% for personal contribution for all families, and an additional $37 per year for LMI families (Revenue Quebec, 2019). In the U.K. when the CDA Policy was active, the government provided an additional £250 for LMI families and another £250 (£500 for low-income families) when the child reached the age of 7 (Prabhakar, 2010; Zichawo et al., 2014).

The automatic progressive subsidy in Azerbaijan can come from the dividends of oil and gas revenues. To use oil and gas dividends, Azerbaijan can refer to the experiences of the U.S. state of Alaska and the Canadian province of Alberta, where oil revenues are distributed in lump-sum annual dividends to citizens. Alaska's largest annual dividend of $2,072 was paid in 2015 (Alaska Department of Revenue, 2019). Alberta offered a direct one-time CAD 400 "prosperity bonus" to each resident for 2005 (Gupta et al., 2014). Alberta also gave citizens a rebate through subsidies that reduced the price of natural gas.

Similarly, Azerbaijan could deposit a rebate into each child's CDA. Given ongoing flows of oil revenues in Azerbaijan, it may be possible for the government to support deposits as children grow. Deposits could be made annually, quarterly, or monthly, depending on the design that Azerbaijan preference and its cost efficiency.

Deposits also could be structured as behavioral incentives—for example, as rewards for each completed year of schooling or for primary- and secondary-school graduation, which would make it less universal by cutting out the poorest families, for whom the loss of income from child labor would be higher than the gains from the government subsidy. Families and caregivers

should be required to match government deposits with an equal amount within a limited time frame such as monthly, quarterly, or annually. They can also deposit more than the required amount.

Centralized Saving Plans

A centralized savings platform, in which accounts are opened and run by a single entity, is another important element for launching CDAs. Having all children in the same system creates coherence in accounting (combining all financial operations) and enables efficiency (Clancy & Beverly, 2017). In addition to consolidated accounting and efficiency, centralization creates accuracy in record keeping as well as oversight of investing, reporting, and communications (Sherraden et al., 2018), effectively reducing costs. Over a period of 15 years, New York's centralized 529 college savings plan reduced fees by about 80%, to 0.15% annually as assets grew (Sherraden et al., 2008). Centralization is also key for inclusiveness: much smaller numbers of people opt out of retirement plans when everyone in a company is automatically enrolled in a single platform than when participants are required to opt-in.

Two of the major themes that emerged from the qualitative studies in Azerbaijan were the mistrust by citizens of private institutions and the underdevelopment of private financial institutions and banking systems. Thus, having accounts in a centralized platform located in a public agency is crucial for the success of CDAs in Azerbaijan. Azerbaijan already uses centralized financial platforms for social pension and disability benefits. It is thus recommended that accounts be opened either at the State Social Protection Fund (SSPF), where all social protection-related benefit accounts are located or at SOFAZ.

The purpose of the SSPF is to regulate distribution of social insurance and pensions to the citizens such as work pensions (social security) and social allowances and benefits (social

welfare) (International Labor Organization, 2017). The SSPF also has a well-established

personal accounting and card system to facilitate payments and electronic infrastructure and

currently provides 20 services, including online registration; accepting applications from

pensioners, farmers, pregnant women, single mothers, and children; and issuing relevant

certificates for pensions and other social benefits and allowances. It also has an online payment

function for pensions and social benefits such as maternity fees, disability pensions, and child

allowances (State Social Protection Fund, 2019). I recommend applying the same experience to

the CDAs with some modifications.

Another suggested option for centralized saving platform in Azerbaijan for CDAs is

SOFAZ, which is an NRF governed by a supervisory board composed of representatives from

state authorities and public agencies that are appointed by the president of the country, including

the executive director, who manages daily activities of the fund.

Potential for Investment Growth and Targeted Investment Options

Potential for investment growth and targeted investment options of CDA policies can

contribute to the growth of savings over time. For instance, $1000, which was the initial deposit

in Oklahoma CDA accounts in 529 plans as part of SEED OK, increased total holdings by more

than 70% over 10 years (Clancy & Beverly, 2017). Savings grow if CDA accounts are opened in

entities that have the potential for growth and are immune to appreciations. Presenting targeted

investment options to families while opening CDA accounts helps them to make appropriate

choices.

If CDAs are held by private banks or investment managers, allowing CDA families to

choose investment options is not advisable, though with a clever default policy allowing them to

choose could be done successfully, adding to the financial literacy education aspect of the CDA.

Underdevelopment of the banking system and financial management infrastructure in Azerbaijan

raises concerns about trust, which is a critical requirement for an effective CDA policy. CDAs

opened through the SSPF in Azerbaijan would, due to security and trust elements, be passive

savings accounts. They would have no potential for growth from investment earnings. However,

CDAs opened through the SOFAZ could offer families a simple set of investment options. I

recommend Azerbaijan offer CDAs with the potential for growth from investment earnings,

giving families a "voice" and experience in the management of CDA assets over time.

Restricted Withdrawals: Assets in CDAs Are Reserved for Postsecondary Education

Restricting withdrawals or restricting what they can be used to pay for is a very important

element to include in CDA accounts. CDA national policies around the globe, except Israel and

some states in the U.S., restrict use of the savings in CDA accounts, primarily to covering

postsecondary education expenses.

Most CDA accounts around the globe were founded with a specific purpose based on the

needs of children. CDAs in Canada, Singapore, and the state of Maine in the U.S are restricted to

financing postsecondary education. Evidence shows positive returns on schooling in terms of

annual earnings, usually amounting to 10% or more per additional year of instruction (Card &

Lemieux, 2000). In these three examples, children can use saved assets to cover postsecondary

education expenses such as tuition, fees, school-related supplies, and living expenses (Han &

Chia, 2012; Huang et al., 2013; Imbeau, 2015; Loke, 2007; Ministry of Education of Singapore,

2019). Restricting CDAs to postsecondary education in Azerbaijan would overlap with the vision

of the country's leadership, which is depicted in the seventh point of the concept of the

development for Azerbaijan, the road map for strengthening and making the country sustainable

by improving the knowledge and skills of the children and youth (President Apparatus of Azerbaijan Republic, 2015).

In addition to designing a CDA policy based on these key elements, I also recommend including elements based on an institutional theory of saving suggested by Sherraden (1991) and the findings of the study in Azerbaijan. The following elements are recommended for responding to the needs of Azerbaijan for a CDA national policy that were communicated by the respondents.

Administration, Delivery and Management of CDAs

Mistrust of private institutions, especially financial institutions, emerged as a theme of the qualitative study in Azerbaijan, and respondents mentioned that families might not sufficiently trust accounts unless they are opened and operated by government agencies. Thus, I recommend that CDA accounts in Azerbaijan be administered and delivered by credible public institutions. This option is practiced by the countries that have CDAs as a national policy—in Canada they are administered by the Department of Human Resources and Skills Development, in Singapore by the Ministry of Social and Family Development, in Israel by private banks and provident funds and supported by the National Insurance Institute, and in South Korea by the Korean Ministry of Health and Welfare (Sherraden et al., 2018).

In Azerbaijan CDAs can be administered and managed by two public entities—the SSPF and SOFAZ, which both seem capable of administering and managing accounts in terms of infrastructure, human and physical resources, and the trust of citizens. CDA administration by these trusted public entities should encourage families to deposit and should promote a culture of relying on government agencies as well as increasing the security of these accounts, which is one of the seven constructs of an institutional theory of saving suggested by Sherraden (1991) to

179

shape the family saving behaviors (Sherraden & Barr 2005; Sherraden et al., 2003). Thus, for Azerbaijan, it is important that accounts be administered by public agencies to be safe, stable, and protected from bankruptcy.

In terms of managing accumulated savings, I recommend beneficiaries not have direct access to accounts. To avoid errors and "leakage" for unapproved expenses, the government agency that administers accounts can transfer CDA funds directly to educational institutions. The system for transferring funds should draw upon the experiences of similar efforts in Canada and the U.S. As the use of CDAs should be restricted to postsecondary education, upon submission of an acceptance letter provided by an academic institution located either in Azerbaijan or abroad, the government agency could transfer payments to relevant institutions for account holders or their siblings. The same can be done to pay for eligible postsecondary-related expenses such as living expenses and book purchases. As in Singapore and Canada, other expenses such as paying for exams or tutoring and buying other school supplies should be avoided.

Holding of accounts varies. In Singapore accounts are held by three banks appointed by the government (Loke, 2015). In Israel, accounts are opened in 12 selected provident funds (Grinstein-Weiss et al., 2019). In Canada, selected big banks have CDA accounts, and their interest rates vary between 2% and 2.5% (Frenette, 2017). Another alternative is the mechanism of Edusave and PSEA accounts in Singapore, which are managed as national education endowment funds and earn interest. In Azerbaijan CDAs can be delivered by the SSPF or SOFAZ depending in which they will be opened.

Incentives in the Form of 1:1 and 3:1 Matching Design

The theory and practice of countries with CDAs confirm attractive saving incentives as one the four important institutional elements to encourage families to save, especially LMI families (Beverly & Sherraden, 1999). Incentives generally encourage people to save, bring savings from other saving vehicles, tend to reduce consumption to take advantage of the incentive, and create a substitution effect, causing a reduction in savings from their own money because the incentives enable them to reach their savings goal without contributing as much of their own money (Choi et al., 2009; Consumer Financial Protection Bureau, 2019). Matching contributions from the government in the form of grants seem to be the most appropriate incentive to achieving increased savings for postsecondary education, especially among low-income families (Fernetti, 2017; Imbau, 2015). Canada and Israel provide lump sum amounts to start accounts and encourage savings (Fernetti, 2017; Grinstein-Weiss et al., 2019; Hun & Chia, 2012). The retirement savings literature shows positive effects of matching incentives on the rate of enrollment by households: a 25% matching contribution was associated with a 5% increase in participation (Imbau, 2015).

Azerbaijan is advised to use the basic 1:1 matching design as an incentive, with higher matches—perhaps up to 3:1—for the poorest families, subject to a monthly, yearly, and/or lifetime cap on the government's portion, which would both encourage low-income families to save and contribute to the development of a savings culture among citizens. But Azerbaijan should introduce a lifetime cap on matching or alternatively fix the monthly amount of the government's portion. For instance, in Canada the lifetime cap for each account is $7,200 (Fernetti, 2017).

Encouraging Other Sources of CDA Deposits

Once CDA accounts are set up for every child, it becomes easier to encourage deposits from other family members or friends, from school or community projects, from philanthropy, from corporations, and from international aid (except religious, terrorist, separatist, and other similar organizations). CDAs linked to education are appealing to many donors for funding and can generate positive energy around such a national goal (Sherraden, 2019).

Ongoing Deposits by Government

The initial seed and any individual savings in CDAs would grow with ongoing infusions from the government. I recommend that government subsidies for CDA deposits in Azerbaijan should come from natural resource revenues. In Israel, the social insurance makes a regular, monthly deposit of $13.50 into each CDA (Grinstein-Weiss et al., 2019). Funding for the deposits comes from a refund of a previous cut in Israel's monthly child allowance; instead of being available for immediate consumption, the funds are distributed as an automatic CDA deposit.

Financial Education Aspect of CDA Accounts for Adults and Children

Targeted financial education is another important element of the institutional determinants that support families in their efforts to save (Beverly & Sherraden, 1999). Financial literacy reflects an individual's knowledge and skills needed for efficient management of financial resources and is an effective approach for individuals to achieve optimal financial decisions, playing an important role in shaping individual financial behavior (Huang et al., 2013). It is an important part of financial capability, which refers to the knowledge, skills, attitude, self-efficacy, and access to financial products, services, and opportunities required to

build savings and other assets and to manage financial resources effectively (Sherraden et al., 2015).

Individuals with little or no financial knowledge make poor financial decisions, such as not saving, not accumulating wealth, not planning for retirement, not investing in stock markets, and incurring debt (Behrman et al. 2010; Huang et al., 2015; Letkiewizc & Fox, 2014; Lusardi et al., 2010; Lusardi & Tufano 2008). Households or individuals who are less financially literate are also less likely to have a checking account, maintain an emergency fund, have a retirement plan, or hold stocks (Christelis et al., 2008; Hilgert & Hogarth 2003), and they more likely to take payday loans, make only minimum payments on credit card balances, take on high-cost mortgages, have higher debt levels, and be delinquent on debt payments (Gerardi et al., 2010; Lusardi & Tufano 2008; Moore 2003). Financial information provided through education can positively influence saving participation and levels of contribution by increasing participants' understanding of their economic vulnerabilities and future return to savings.

Financial education and saving for children's college expenses are effective elements of financial behavior (Grimes et al., 2010; Walstad et al., 2010) and are positively associated with opening and holding college accounts among mothers in the SEED OK treatment group (Huang et al., 2015). Financial knowledge and 529 account holding are consistent with the findings from a study of the Maine 529 plan (Huang et al., 2015), which shows that financially sophisticated parents are more likely to open 529 accounts for their children. College saving plans, such as 529 accounts, are savings accounts in the U.S. for covering post-secondary education expenses and they are tax-advantaged (Huang et al., 2013). There are two types of 529 accounts—prepaid tuition plans and education saving plans. Financial literacy also correlates positively with asset accumulation among young Americans in both illiquid and liquid assets, with a one standard

183

deviation increase associated with 30% and 60% and increases, respectively (Letkiewizc & Fox, 2014).

Azerbaijan could foster financial education for children and families with the support of the Center for Social Development's curriculum. It can be delivered in several ways. One is through conventional training methods at local Social Protection Centers of the Ministry of Labor and Social Protection, which exist in all administrative districts of Azerbaijan. Schools are also possible venues to deliver training to parents and caregivers. I recommend including financial literacy in the school curriculum by delivering it through the Livelihood Skills class (Həyat Bilgisi), which is also delivered online (Ministry of Education, 2019).

Online courses can make financial education widely available, especially to those who live in remote rural areas, cannot commute easily, or are not able to leave home due to full-time household responsibilities. Letting these groups access training through the Internet could ensure an equal opportunity for all and close the gap between men and women, the center, and the periphery.

Information communication technologies (ICTs) are a powerful tool for social and economic inclusion for people with disabilities (Piaggesi et al., 2013), and I recommend using them to reach out to vulnerable groups in Azerbaijan to deliver financial education. I also suggest incorporating ICTs such as mobile phones and instant messaging systems to deliver financial knowledge and make information accessible for caregivers and children. In Azerbaijan, sending commercial, promotional, and marketing bulk texts by cell phone is widespread (MPromo, 2019), and spam texts are common. Based on this experience, I suggest short text messages about the importance of asset accumulation, tips on saving, and brief information related to financial capability be sent to citizens. Awareness-raising materials such as booklets and

brochures at social protection centers and schools and community-based child polyclinics can be used for this purpose.

Online Banking, Information, and Access

Families and children should be informed about their accounts on a regular basis and have direct access to them. I recommend applying online banking systems (e-banking) to CDAs. incorporating ICTs into socioeconomic interventions is one of the UN's recommendations for eradicating poverty (UNESCO, 2019). Online banking systems with application by the Ministry of Communications and High Technologies of Azerbaijan with limited operations are desirable to make operations easy and accessible to families. CDA e-banking operations should be limited to seeing the account balance and making deposits by family members, caregivers, and others.

Mobile applications with limited functions to help families without an internet connection access their accounts through their cell phones will increase trust as people will be able to monitor their accounts and see operations. This option will especially make accounts accessible to family members who live in remote rural areas where no banks or ATMs are available. Online banking will solve physical banking infrastructure gaps, which are an issue in remote rural areas. But in Azerbaijan, almost everyone has a smartphone with an internet connection.

ICT sector development has been accelerated mostly by the mobile segment of the telecom industry, and Internet usage increased from 17% of the population in 2008 to 73% in 2013. In 2014, wireless penetration per capita had grown to over 100%, whereas around one-third of the population had gained access to mobile broadband, and 30% of households had subscribed to fixed (wired) broadband Internet (Asian Development Bank, 2019; World Bank, 2014). These ICT-enabled solutions could reduce the transaction costs of migrant remittances to less than 3% and eliminate remittance corridors with costs higher than 5%.

185

Facilitation of Accounts

Facilitation refers to conditions that enable citizens to save automatically in designated amounts from salaries or other sources (Beverly & Sherraden, 1999). Automatic deposits from employee wages are a promising means of accumulating savings. Facilitation is another important aspect of the institutional theory of savings, which suggests that individuals save better under institutionalized facilitation (Beverly & Sherraden, 1999). In Israel, the government deducts from universal child allowances and deposits the money into saving accounts (Grinstein-Weiss et al., 2019). In Azerbaijan, the universal child allowance was canceled in 2006, so this sort of transfer will not be possible unless the UCDA is redefined as a reimbursement of the canceled child allowance. Moreover, because not everyone receives a monthly paycheck, it would be hard to facilitate the operation by a universal mechanism at this point for Azerbaijan. But there is a movement to revive universal child allowances in coming years, in which case I recommend following the Israeli model of automatically deducting half the benefit and depositing it into the CDAs. Deposits from all other sources—family, friends, philanthropic organizations, businesses—would also be encouraged but are less likely to be set up as regular and automatic flows into accounts.

Research Component of CDAs

To inform future policy decisions, a national CDA policy should include a strong research component with systematic data collection to provide a window into what determines saving among citizens in Azerbaijan and where the policy should focus more. Research can inform future policy assessments and adaptations where necessary. The Center for Social Development can advise or partner with Azerbaijan in developing a plan for CDA policy research.

Economic and Political Risks in Long-Term Asset Accumulation

Long-term asset accumulation involves risk. One source of risk is from developments in the macroeconomy, especially inflation or a sudden devaluation. These risks are present in any CDA policy in any country and must always be given careful consideration. A basic policy principle is that, insofar as possible, CDA assets should be protected from loss of real value over time.

Asset Management

The management of assets in CDAs is an important issue. By assigning this responsibility to the SSPF, SOFAZ or the Central Bank, Azerbaijan can foster a "protected space" in which to develop institutions for long-term asset management. Residential-care institutions in Azerbaijan save monthly allowances for children in their custody who do not have both parents, making accumulated funds available to the youth when they reach the age of 18. Insights from managing those allowances can inform the government's management of CDAs and build upon that system's benefits by investing the funds in options with the potential for investment earnings. Building secure and effective asset management could be an explicit goal of CDA policy. Asset management institutions, after "fully grown" for CDAs, could then begin to serve other national purposes.

3.4. Conclusion

Asset-building policies and programs such as CDAs have proven to complement current anti-poverty strategies and encourage the long-term development of individuals and families (Sherraden & Stevens, 2010). Compared with countries in the region, Azerbaijan has a better potential to launch CDAs because of oil and gas revenues, a stable political environment, and

existing financial platforms. Using the successful experience of Canada, Singapore, Israel, South Korea, and the U.S, Azerbaijan should aim for CDAs as a cost-effective, sustainable, and progressive socioeconomic intervention to develop human, social, and cultural capital. CDAs not only help human development but by spurring the creation of a saving culture could increase financial literacy and close the gap between rich and poor in postsecondary education.

Many youths in Azerbaijan do not continue on to postsecondary education as their families cannot pay for college tuition and expenses. Evidence-based and progressive CDAs may eliminate this problem and enable every citizen of Azerbaijan to have access to postsecondary education, which could lead to a knowledgeable generation competitive in the ongoing fourth industrial revolution where knowledge and skills are important (Peters, 2017).

3.5. References

Adeleke, I., & Zubairu, U. M. (2021). Breaking the Resource Curse: The Role of Natural Resource Funds. *The Spirit of Society Journal*, 4(2), 99-109.

Acemoglu, D. (2012). What does human capital do? A review of Goldin and Katz's The race between education and technology. *Journal of Economic Literature*, 50(2), 426-63

Alaska Department of Revenue. (2019). Permanent Fund Dividend Division: Summary of dividend applications and payments. https://pfd.alaska.gov/Division-Info/Summary-of-Applications-and-Payments

Alberta Government. (2019). *Alberta Heritage Savings Trust Fund*. https://open.alberta.ca/publications/4993570

Alberta Department of Energy. (2009). *Natural Gas Rebate Program*. http://www.assembly.ab.ca/lao/library/egovdocs/2006/aleo/158115.pdf

Araji, S. M., & Mohtadi, H. (2018). Natural resources, incentives and human capital: reinterpreting the curse. *Middle East Development Journal*, 10(1), 1-30.

Asian Development Bank. (2019). *Country diagnostics. Azerbaijan: Country digital development overview*. https://www.adb.org/sites/default/files/institutional-document/484586/aze-digital- development-overview.pdf

Auty, R. M. (1995). Industrial policy, sectoral maturation, and postwar economic growth in Brazil: The resource curse thesis. *Economic Geography*, 71(3), 257-272.

Bauer, A., & Mihalyi, D. (2018). Premature funds: How overenthusiasm and bad advice can leave countries poorer. *Natural Resource Governance Institute Briefing*. Available at: https://resourcegovernance. org/sites/default/files/documents/premature-funds. pdf.

Barr, M. S., & Sherraden, M. W. (2005). Institutions and inclusion in saving policy. Building

    Assets, Building Wealth: Creating Wealth in Low-income communities, N. Retsinas and

    E. Belsky, eds., Brookings Press.

Basu, K., Das, S., & Dutta, B. (2007). Child labor and household wealth: Theory and empirical

    evidence of an inverted-U (IZA Discussion Paper, No. 2736). Institute for the Study of

    Labor.

Beverly, S. G., & Sherraden, M. (1999). Institutional determinants of saving: Implications for

    low-income households and public policy. *The Journal of Socio-Economics*, *28*(4), 457–

    473

Bernheim, B. D., & Scholz, J. K. (1993). Private saving and public policy. *Tax Policy and the*

    Economy 7, 73–110.

Birdsall, N., & Subramanian, A. (2004). Saving Iraq from its oil. *Foreign Affairs,* 83, 77

Blunch, N., & Verner, D. (2001). Revisiting the link between poverty and child labor: The

    Ghanaian experience (Working Paper 01-03). Aarhus, Denmark: Aarhus School of

    Business, Centre for Labor Market and Social Research.

Blomquist, W., Dinar, A., & Kemper, K. E. (2010). A framework for institutional analysis of

    decentralization reforms in natural resource management. *Society and Natural Resources,*

    23(7), 620-635.

Balding, C. (2011). A portfolio analysis of sovereign wealth funds. In Sovereign wealth: The role

    of state capital in the new financial order (pp. 43-70).

Canada Revenue Agency (2019). Education Assistance Payments. Retrieved on March, 2022

    from https://www.canada.ca/en/revenue-

agency/services/tax/individuals/topics/registered-education-savings-plans-

resps/payments-resp/educational-assistance-payments-eaps.html

Card, D., & Lemieux, T. (2000). *Dropout and enrollment trends in the post-war period: What went wrong in the 1970s?* (No. w7658). National Bureau of Economic Research.

Choi, J. J., Laibson, D., Madrian, B. C., & Metrick, A. (2009). Reinforcement learning and savings behavior. *The Journal of finance*, *64*(6), 2515–2534.

Chowa, G., Ansong, D., & Masa, R. (2010). Assets and child well-being in developing countries: A research review. *Children and Youth Services Review*, *32*(11), 1508–1519.

Christelis, Dimitris, Tullio Jappelli, and Mario Padula. 2008. "Cognitive Abilities and Portfolio Choice." Working Paper No. 2008_19. Venice: University of Venice Department of Economics.

Cechini, S., Filgueira, F., Martínez, R., & Rossel, C. (2015). Rights and the life cycle: reordering social protection tools. *Towards universal social protection: Latin American pathways and policy tools. Santiago: ECLAC, 2015. LC/G. 2644-P. p.25–45*.

Clancy, M. M., & Beverly, S. G. (2017). Statewide Child Development Account Policies: Key Design Elements (CSD Policy Report 17-30). St. Louis, MO: Washington University. *Center for Social Development*.

Clancy, M. M., Sherraden, M., & Beverly, S.G. (2019, November). *Child Development Accounts at Scale: Sample State Legislation.* [Policy Summary No. 19-46]. https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1899&context=csd_research

Claypool, E., & Ismayilova, L. (2019). A gender focused analysis of structural and social

    precipitators to child institutionalization in Azerbaijan: A qualitative study. *Social*

    Science & Medicine, 232, 262–269. https://doi.org/10.1016/j.socscimed.2019.04.039

Collier, P. (2017). The institutional and psychological foundations of natural resource

    policies. *The Journal of Development Studies*, 53(2), 217-228.

Collins, G. (2018). Permian Oil & Gas Production: Is It Becoming Financially Sustainable?.

Consumer Financial Protection Bureau (2019). *Child Saving Accounts: Using Incentives to*

    Encourage Participation. https://files.consumerfinance.gov/f/documents/cfpb_child-

    savings-accounts-incentives_report.pdf

David Card & Thomas Lemieux, 2000. *Can Falling Supply Explain the Rising Return to College*

    for Younger Men? A Cohort-Based Analysis (NBER Working Papers 7655). National

    Bureau of Economic Research, Inc.

Debrah, E., & Graham, E. (2015). Preventing the oil curse situation in Ghana: The role of civil

    society organizations. *Insight on Africa*, 7(1), 21-41.

Devarajan, S., Raballand, G., & Le, T. M. (2011). Direct redistribution, taxation, and

    accountability in oil-rich economies: A proposal. *Center for Global Development*

    working paper, (281).

Dupuy, K. E. (2017). Corruption and elite capture of mining community development funds in

    Ghana and Sierra Leone. *Corruption, Natural Resources, and Development: From*

    Resource Curse to Political Ecology, 69-80.

Elliott, W., Chowa, G., & Loke, V. (2011). Toward a children's savings and college-bound

    identity intervention for raising college attendance rates: A multilevel propensity

    scoreanalysis. *Sociology Mind*, 01, 192. https://doi.org/10.4236/sm.2011.14025.

Elliott, W., & Beverly, S. (2011). Staying on course: The effects of savings and assets on the

    college progress of young adults. *American Journal of Education*, *117*(3), 343–374.

Elliott, W., & Sherraden, M. (2013). Assets and educational achievement: Theory and evidence.

    Economics of Education Review, *33*, 1–7.

Employment and Social Development of Canada (2015). Design Effectiveness Assessment of the

    Canada Education Savings Program Compliance Review Framework.

    https://www.canada.ca/en/employment-socialdevelopment/corporate/reports/audits/2016-

    cesp-assessment.html

Fischer, C. (2007). International experience with benefit-sharing instruments for extractive

    resources. *Resources for the Future*, *Washington DC*.

Filmer, D., & Pritchett, L. (2001). Estimating wealth effects without expenditure data – or tears:

    An application to educational enrollment in states of India. *Demography, 38*(1), 115–132.

Frenette, M. (2017, April). Investments in Registered Education Savings Plans and

    Postsecondary Attendance. *Economic Insights, 71. Statistics Canada, Catalogue no.* 11-

    626-X. https://files.eric.ed.gov/fulltext/ED585297.pdf

Friedline, T., Elliott, W., & Chowa, G. A. (2013). Testing an asset-building approach for young

    people: Early access to savings predicts later savings. *Economics of Education Review,*

    33, 31–51.

Gale, S. J. (2019). Lies and misdemeanours: Nauru, phosphate and global geopolitics. *The*

    Extractive Industries and Society, 6(3), 737-746.

Gosling, A., Shackleton, C. M., & Gambiza, J. (2017). Community-based natural resource use and management of Bigodi Wetland Sanctuary, Uganda, for livelihood benefits. *Wetlands ecology and management*, 25(6), 717-730.

Gerardi, Kristopher, Lorenz Goette, and Stephan Meier. 2010. *Financial literacy and subprime mortgage delinquency: Evidence from a survey matched to administrative data.* (Working Paper No. 2010-10). Federal Reserve Bank of Atlanta.

Gelb, A. (2010). Economic diversification in resource-rich countries. *Center for Global Development,* 1-23.

Grafton, R. Q., & Little, L. R. (2017). Risks, resilience, and natural resource management: Lessons from selected findings. *Natural Resource Modeling*, 30(1), 91-111.

Grinstein-Weiss, M., Shanks, T. R. W., & Beverly, S. G. (2014). Family assets and child outcomes: Evidence and directions. *The Future of Children*, 147–170.

Grinstein-Weiss, M., Kondratjeva, O., Roll, S. P., Pinto, O., & Gottlieb, D. (2019). The Saving for Every Child Program in Israel: an overview of a universal asset-building policy. *Asia Pacific Journal of Social Work and Development*, *29*(1), 20–33

Gottlieb, D. and N. Barkali, 2020, (work in progress), A Universal Child Development Account - Its implementation and policy implications in Israel.

Government of Canada (2019). Provincial Education Saving Incentives. https://www.canada.ca/en/services/benefits/education/education-savings/provincial.html

Grimes, P. W., Rogers, K. E., & Smith, R. C. (2010). High school economic education and access to financial services. *Journal of Consumer Affairs*, *44*(2), 317–335.

Gugushvili, D., & Hirsch, D. (2014). Means-tested and universal approaches to poverty: international evidence and how the UK compares (no. CRSP working paper 640). Leicestershire: Centre for Research in social policy, Loughborough University.□

Gupta, S., Segura-Ubiergo, A., & Flores, E. (2014). *Direct distribution of resource revenues: Worth considering?* (IMF Staff Discussion Note No. 14/5). International Monetary Fund. http://dx.doi.org/10.5089/9781484367209.006

Gylfason, T. (2012). Development and growth in resource-dependent countries: Why social policy matters. *In Mineral Rents and the Financing of Social Policy* (pp. 26-61). Palgrave Macmillan, London.

Habibov, N., & Fan, L. (2007). Social protection and poverty in Azerbaijan, a low-income country in transition: Implications of a household survey. *International Social Security Review*, *60*(4), 47–68.

Han, C. K., & Chia, A. (2012). A preliminary study on parents saving in the Child Development Account in Singapore. *Children and Youth Services Review*, *34*(9), 1583–1589.

Henderson, G. E. (2019). Group RESPs: The intersection of government support for education savings and securities regulation. *University of Toronto Law Journal*, *69*(1), 44-84.

Hilgert, Marianne A., and Jeanne M. Hogarth. 2003. Household Financial Management: The Connection Between Knowledge and Behavior. *Federal Reserve Bulletin* 89(7), 309–322.

Hopkins, M., Lawrence, J. E. S., Stephens, T., & Webster, A (2008). Converting black gold into human gold: Using oil revenues to achieve sustainable development [Report]. United Nations Development Program website: https://www.undp.org/content/dam/azerbaijan/docs/publications/sustainabledevelopment/BGHG_full_report1.pdf

Hossu, C. A., Ioja, I. C., Susskind, L. E., Badiu, D. L., & Hersperger, A. M. (2018). Factors driving collaboration in natural resource conflict management: Evidence from Romania. *Ambio*, 47(7), 816-830.

Huang, J., Beverly, S., Clancy, M., Lassar, T., & Sherraden, M. (2013). Early program enrollment in a statewide Child Development Account Program. *Journal of Policy Practice*, *12*(1), 62–81.

Huang, J., Nam, Y., & Sherraden, M. S. (2013). Financial knowledge and child development account policy: A test of financial capability. *Journal of Consumer Affairs*, *47*(1), 1–26.

Huang, J., Sherraden, M., & Purnell, J. Q. (2014). Impacts of Child Development Accounts on maternal depressive symptoms: Evidence from a randomized statewide policy experiment. *Social Science & Medicine*, *112*, 30–38.

Huang, J., Nam, Y., Sherraden, M., & Clancy, M. M. (2015). Financial capability and asset accumulation for children's education: *Evidence from an experiment of Child Development Accounts. Journal of Consumer Affairs, 49*(1), 127–155.

Huang, J., Kim, Y., Sherraden, M., & Clancy, M. (2017). Unmarried mothers and children's social-emotional development: the role of child development accounts. *Journal of Child and Family Studies*, *26*(1), 234-247.

Huang, J., Zou, L., & Sherraden, M. (2020). *Inclusive child development Accounts: Towards universality and progressivity*. Routledge

Humphreys, M., Sachs, J. D., Stiglitz, J. E., Humphreys, M., & Soros, G. (2007). *Escaping the resource curse.* Columbia university press.

Hunziker, P., & Lars-Erik C. (2017). No extraction without representation: The ethno-regional oil curse and secessionist conflict. *Journal of Peace Research* 54(3), 365-381.

Karl, T. L. (2007). Oil-led development: social, political, and economic consequences. *Encyclopedia of energy*, 4(8), 661-672.

Kim, Y., Huang, J., Sherraden, M., & Clancy, M. (2017). Child development accounts, parental savings, and parental educational expectations: A path model. *Children and Youth Services Review*, *79*, 20–28.

Kamiński, T. (2017). Sovereign Wealth Fund investments in Europe as an instrument of Chinese energy policy. *Energy Policy*, 101, 733-739.

Kumlin, S., & Rothstein, B. (2005). Making and breaking social capital: The impact of welfare-state institutions. *Comparative political studies*, 38(4), 339-365.

Imbeau, E. (2015). *Analysis of the Canada Education Savings Program participation and expenditures for different income groups. Technical Report. Employment and Social Development Canada*. http://publications.gc.ca/collections/collection_2017/edsc-esdc/Em20-63-2017-eng.pdf

International Labor Organization (2017). Universal Social Protection Floors: Costing Estimates and Affordability in 57 Lower Income Countries. ESS─Working Paper No. 58. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/wcms_614407.pdf

International Labor Organization (2016). Universal Social Protection: Universal Social Pension in Azerbaijan. https://www.social-protection.org/gimi/gess/RessourcePDF.action?id=53948

Ismail, A., & Rashid, K., (2013). Determinants of household saving: Cointegrated evidence from Pakistan, 1975–2011. Economic Modelling, 32(0), 524–531.

Ismayilova, L., Ssewamala, F., & Huseynli, A. (2014). Reforming child institutional care in the Post-Soviet bloc: The potential role of family-based empowerment strategies. *Children and Youth Services Review*, *47*, 136–148.

Johnson, E., & Sherraden, M. S. (2007). From Financial Literacy to Financial Capability Among Youth. *Journal of Sociology & Social Welfare*, *34*, 119.

Kumlin, S., & Rothstein, B. (2005). Making and breaking social capital: The impact of welfare-state institutions. *Comparative political studies*, *38*(4), 339–365.

Kim, Y. (2012). *Seoul Hope Plus Savings Accounts: Asset-building program for low-income households in Seoul* (Research Report No 12-32). Center for Social Development. https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1368&context=csd_researc h

Lau, M. K. W., & Chou, K. L. (2019). Targeting, Universalism and Child Poverty in Hong Kong. *Child Indicators Research*, *12*(1), 255–275.

Loke, V. (2007). Building Children's Assets in Singapore: The Post-Secondary Education Account Policy.

Loke, V. (2015). *Building Children's Assets in Singapore: The Beginning of a Lifelong Policy*. [Policy Brief].

https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1694&context=csd_research

Loke, V., & Sherraden, M. (2009). Building assets from birth: A global comparison of child development account policies. *International Journal of Social Welfare*, *18*(2), 119–129.

Loke, V., & Sherraden, M. (2019). Building assets from birth: Singapore's policies. *Asia Pacific Journal of Social Work and Development*, 29(1), 6–19. https://doi.org/10.1080/02185385.2019.1571940

Letkiewicz, J. C., & Fox, J. J. (2014). Conscientiousness, financial literacy, and asset

    accumulation of young adults. *Journal of Consumer Affairs*, *48*(2), 274–300.

Lerman, R. I., & McKernan, S. M. (2008). Benefits and consequences of holding assets. *Asset*

    building and low-income families, 175–206.

Lusardi, A., Mitchell, O.S., & Curto, V. (2010). "Financial Literacy Among the Young:

    Evidence and Implications for Consumer Policy." NBER Working Paper No. 15352.

    Cambridge, MA: National Bureau of Economic Research.

Lusardi, A., and Tufano, P. (2008). "Debt Literacy, Financial Experience, and

    Overindebtedness." Dartmouth College Working Paper. Hanover, New Hampshire:

    Dartmouth College.

Legislative Council Secretariat (2018). Child Saving Programs in Selected Countries.

    Information Note. https://www.legco.gov.hk/research-publications/english/1718in16-

    child-savings-programmes-in-selected-places-20181003-e.pdf

Mahon, J. E. (2018). Taxation, redistribution, and models of fiscal politics in Latin

    America. *Japanese Journal of Political Science,* 19(3), 353-375.

Mendoza, R. U., MacArthur, H. J., & Ong Lopez, A. B. (2015). Devil's excrement or manna

    from heaven? A survey of strategies in natural resource wealth management.

    International Journal of Development Issues, 14(1), 2-25.

Mesagan, P. E., Yusuf, A. I., & Ogbuji, A. I. (2019). Natural resource endowment and output

    growth: How crucial is deficit financing in managing resource-rich African economies?.

    Journal of Social and Economic Development, 21(2), 353-369.

Ministry of Labor and Social Protection of Azerbaijan (2019). Müavinətlər.

    http://sosial.gov.az/m%C3%BCavin%C9%99tl%C9%99r

Ministry of Social and Family Development of Singapore (2015). *Baby Bonus*.

https://www.babybonus.msf.gov.sg/wp-content/parent/documents/BB-booklet.pdf

Ministry of Education of Singapore (2019). *Post-Secondary Education Account*. [Brochure].

https://www.moe.gov.sg/education/post-secondary/post-secondaryeducation-account

Ministry of Finance of Israel (2019). *Savings plan for each child-explanations.*

https://haotzarsheli.mof.gov.il/Documents/english.pdf

Ministry of Education (2019). İnteraktiv Dərslər: Həyat Bilgisi.

http://edu.mimio.az/catalog/index/31

MPromo (2019). Mobile Marketing. http://mpromo.az/?lang=en

Money Smart (2019). Baby Bonus Singapore (2019): What is Baby Bonus.

https://blog.moneysmart.sg/family/baby-bonus-singapore-payout/

Moore, Danna. 2003. "Survey of Financial Literacy in Washington State: Knowledge, Behavior,

Attitudes and Experiences." Social and Economic Sciences Research Center Technical

Report No. 03-39. Washington State University.

Moss, T., Lambert, C., & Majerowicz, S. (2015). *Oil to cash: fighting the resource curse through

cash transfers*. CGD Books.

National Insurance Institute (2019). Saving Plans for Every Child.

https://www.btl.gov.il/English%20Homepage/Benefits/Children/'Savings%20plan/Pages/

default.aspx

Natural Resource Governance Institute (2015). The Resource Curse: the Political and Economic

Challenges of Natural Resource Wealth. Retrieved on March 2022 from

https://resourcegovernance.org/sites/default/files/documents/nrgi_readers_compilation.pd

f

Ndikumana, L., & Abderrahim, K. (2010). Revenue mobilization in African countries: does natural resource endowment matter? *African Development Review*, 22(3), 351-365.

Olawoye, S. (2018). Resource Funds: Another Side of the Austerity Die. *International Journal of Political Economy*, 47(2), 112-129.

Onifade, T. T. (2017). Regulating Natural Resource Funds: Alaska Heritage Trust Fund, Alberta Permanent Fund, and Government Pension Fund of Norway. *Global Journal of Comparative Law*, 6(2), 138-173.

Parkin, A. (2016). Family Savings for Post-Secondary Education.

http://www.theomegafoundation.ca/documents/Family-Savings-for-Post-Secondary-Education.pdf

Peng, T. C. M., Bartholomae, S., Fox, J. J., & Cravener, G. (2007). The impact of personal finance education delivered in high school and college courses. *Journal of family and economic issues*, *28*(2), 265–284.

Peters, M. A. (2017). Technological unemployment: Educating for the fourth industrial revolution. *Journal of Self-Governance and Management Economics*, *5*(1), 25–33.

Piaggesi, D., Castelnovo, W., & Battistella, L. R. (2013). ICT for Social Inclusion and Equal Opportunities: CETI-D, an e-Governance Good Practice in Brazil. In *E-Government Implementation and Practice in Developing Countries* (pp. 147–171). IGI Global.

Pinto O. and D. Gottlieb, (2019), Saving for every child and Inequality, (in Hebrew), National Insurance Institute, Israel.

Ploeg, R. V. D. (2014). Guidelines for exploiting natural resource wealth. *Oxford Review of Economic Policy*, 30(1), 145-169.

President Apparatus of Azerbaijan Republic (2015). Azerbaijan 2020: Look into the future: Concept of Development. https://president.az/files/future_en.pdf

Prabhakar, R. (2010). The Child Trust Fund in the UK: How might opening rates by parents be increased? *Children and Youth Services Review*, *32*(11), 1544–1547.

Robeyns, I. (2005). The capability approach: A theoretical survey. *Journal of Human Development, 6*(1), 93–114.

Robinson, J. A., & Torvik, R. (2005). White elephants. *Journal of public economics*, 89(2-3), 197-210.

Ross, M. L. (2012). *The oil curse*. Princeton University Press.

Triki, T., & Faye, I. (2011). Africa's Quest for Development: Can Sovereign Wealth Funds Help? *In Institutional investors in global capital markets*. Emerald Group Publishing Limited.

Sachs, J. D., & Warner, A. M. (2001). The curse of natural resources. *European economic review*, 45(4-6), 827-838

Sala-i-Martin, X., & Subramanian, A. (2013). Addressing the natural resource curse: An illustration from Nigeria. *Journal of African Economies*, 22(4), 570-615.

Save the Children. (2020). Azerbaijan. https://www.savethechildren.org/us/what-we-do/where-we-work/greater-middle-east-eurasia/azerbaijan

Simone Cecchini and others. (2015), Towards universal social protection: Latin American pathways and policy tools, ECLAC Books, No. 136 (LC/G.2644-P), Santiago, EconomicCommission for Latin America and the Caribbean (ECLAC), 2015.

Singapore Ministry of Education (2019). *The Education Endowment and Savings Schemes.*

    Annual Report for Financial Year. https://www.moe.gov.sg/docs/default-

    source/document/initiatives/edusave/files/edusave-report-2018-2019.pdf

Sherraden, M. (1991). *Assets and the Poor: A New American Welfare Policy.* M. E. Sharpe, Inc.

Sherraden, M., Zou, L., Ku, B. H. B., Deng, S., & Wang, S. (Eds.). (2014). *Asset-building*

    policies and innovations in Asia. Routledge

Sen, A. (1999). Development as freedom. Anchor Books.

Sherraden, M., Clancy, & Beverly (2018). *Taking child development accounts to scale: Ten key*

    policy design elements (CSC Policy Brief 18-08). https://openscholarship.wustl.edu/cgi/

    viewcontent.cgi?article=1043&context=csd_research

Sherraden, M., & Stevens, J. (Eds.) (2010). *Lessons from SEED: A national demonstration of*

    child development accounts (CSD Policy Brief 10-19).

    http://csd.wustl.edu/Publications/Documents/SEEDSynthesis_Final.pdf

Ssewamala, F. M., Sperber, E., Zimmerman, J. M., & Karimli, L. (2010). The potential of asset-

    based development strategies for poverty alleviation in Sub-Saharan Africa. *International*

    Journal of Social Welfare, *19*(4), 433–443.

Ssewamala, F. M., & Ismayilova, L. (2009). Integrating children's savings accounts in the care

    and support of orphaned adolescents in rural Uganda. *Social Service Review*, *83*(3), 453–

    472

Torvik, R. (2018). Should developing countries establish petroleum funds? *The Energy*

    Journal, 39(4).

UNICEF (2018a). *The rights of children and why they matter. The work of UNICEF in Azerbaijan.* https://www.unicef.org/azerbaijan/media/661/file/Children-why-they-matter-ENG.pdf%20.pdf

Uncief. (2018b). *Azerbaijan: Children by the numbers*. https://www.unicef.org › azerbaijan › about_2185

UNICEF (2019, March 7). *75% of children with disabilities in Eastern and Central Europe and Central Asia left out of inclusive, quality education* [Press release]. https://www.unicef.org /azerbaijan/press-releases/75-children-disabilities -eastern-and-central-europe-and-central-asia-left-out

UNESCO (2019). ICT for Sustainable Development. Recommendations for Public Policies that Guarantee Rights.

http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Montevideo/images/Policy_Paper _TICDesarrollo_Sostenible_EN.pdf

United Nations (2015). Sustainable Development Goals. https://sustainabledevelopment.un.org/?menu=1300

United Nations Population Fund (2014). Child marriage in Azerbaijan (County Summary). https://eeca.unfpa.org/sites/default/files/pub -pdf/unfpa%20azerbaijan%20summary.pdf

Van der Ploeg, F., & Venables, A. J. (2011). Harnessing windfall revenues: optimal policies for resource☐rich developing economies. *The Economic Journal*, 121(551), 1-30.

Wagmiller, R. L., Jr., & Adelman, R. M. (2009). *Childhood and intergenerational poverty: The long-term consequences of growing up poor* (National Center for Children in Poverty Report). https://doi.org/10.7916/D8MP5C0Z

Walstad, W. B., Rebeck, K., & MacDonald, R. A. (2010). The effects of financial education on the financial knowledge of high school students. *Journal of Consumer Affairs*, *44*(2), 336–357.

Washington University in St. Louis. (2019, May 28). *CSD helps Nebraska add college saving plans for newborns. Brown School center offers research, advice, and legislative testimony to help states implement CDAs.* [Press release]. https://source.wustl.edu/2019/05/csd-helps-nebraska-add-college-savings-plan-for-newborns/

Wiens, D. (2015). Natural resources and government responsiveness. *Politics, Philosophy & Economics*, 14(1), 84-105.

World Bank. (2014). *A Sector Assessment: Accelerating Growth of High-Speed Internet Services in Azerbaijan.* http://documents.worldbank.org/curated/en/585201468206662555/pdf/AUS91950REVISED0Box385411B00PUBLIC0.pdf

World Vision. (n.d.). About us. https://www.wvi.org/azerbaijan/about-us

Yorbana, S. G. (2017). Representations of Oil in Chad: A Blessing or a Curse?. *Africa Spectrum*, 52(1), 65-83.

Zichawo, W., Farber, C., & Mensah, L. (2014). Child trust funds: Renewing the debate for long-term savings policies. *Issue Brief, March. Initiative on Financial Security, The Aspen Institute, Washington, DC*.

Zou, L., & Sherraden, M. (2010). Assets for Children: Experiences in Asia and Implications for China. *Online Submission*, *7*(8), 87–94.

Conclusion

The purposes of the three dissertation papers have been: (1) to expand resource curse theory and analysis of child well-being in resource-rich low-to-middle income countries, (2) to empirically test the theory, and (3) to develop a potential policy intervention for children in these countries. The resource curse defines regressive development despite massive wealth from natural resources in low-to-middle income (LMI) countries. The negative effects of the resource curse on the quality of governance, democracy, shared economic growth, human rights, and social protection have been studied since the late 1980s. But few studies have focused on the situation of vulnerable groups from the perspective of the resource curse. In this dissertation, I chose children as a vulnerable group, and extend resource curse analysis to illuminate challenges and potential policy solutions.

The first paper has suggested a new conceptual framework to study the link between the resource curse and child well-being, with mediation through social protection. I apply the conceptual model to all resource-rich LMI countries. The second paper has looked, from the perspective of the resource curse, at the situation of children in six-post Soviet countries, using both quantitative and qualitative methods. The third paper has used findings from another in-depth qualitative study, in order to develop a policy intervention for oil-gas-rich Azerbaijan, aimed at improving the well-being of children.

The findings of the first two papers confirmed the hypothesis of the resource curse regarding the negative effect of oil on child well-being—when countries have more oil wealth, child well-being declines. But the findings showed that social protection measures such as health and employment decreased the negative effect of oil on child well-being in resource-rich LMI countries. The findings of the first paper also supported hypotheses of the resource curse about

the positive effect of democracy and high income on child well-being. In contrast, democracy and government effectiveness had a negative impact on child well-being in six post-Soviet countries in the second paper. Findings from a qualitative study in six post-Soviet countries illuminated this result, showing that democracy, although it may be formally present, is not well-developed in post-Soviet countries. Frequent changes in all levels of governance, coupes, and de facto autocratic democracies interrupt and stop reforms in child-wellbeing in post-Soviet countries. This may be the most important contribution of my research, as a potential caution or adjustment in the application of resource curse theory.

Related to the above, another important finding is government effectiveness was a major issue in all six countries, despite the existence of democracy or natural resources. Both groups of countries will benefit from improvement in the effectiveness of governance, as a foundation for the design and implementation of policies and services for child well-being.

Overall, the research confirms that the resource curse diminishes child well-being in resource-rich LMI countries. However, policies for health, employment, and social protection decrease the negative effect of oil on child well-being. A major applied implication is that countries that are experiencing the resource curse should make purposeful social investments to support and develop their people, with the protection and development of children as a priority. As my third paper documents, one innovative strategy may be Child Development Accounts, which is now receiving some policy attention in Azerbaijan, and perhaps later in other post-Soviet countries. To take only one possibility, when the disastrous Russian invasion of Ukraine is resolved, Ukraine will require huge international investments to rebuild. One productive channel for those investments could be asset-building for household stability and future development of all the children.