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Public Financial Management of the Sovereign Wealth Funds

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Public Financial Management of the Sovereign Wealth Funds

D. Manuel Fernández Grela

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RESUMO

A dispoñibilidade de recursos naturais como o petróleo e o gas natural debería ser valiosa para un país en desenvolvemento. As actividades extractivas deberían xerar emprego e crecemento económico, e os ingresos da súa venda deberían proporcionar ao país as divisas necesarias e compensar os ingresos fiscais limitados que recada o seu goberno. Porén, moitas economías ricas en recursos están suxeitas á chamada “maldición dos recursos”. Esta pode manifestarse na desindustrialización do país, ou na apreciación da súa moeda, a chamada “doenza holandesa”. O uso axeitado dos recursos naturais require investimentos en activos que só chegarán a ser rendibles co paso do tempo, pero non é doado identificar estes activos, polo que faise necesaria a xestión dos ingresos. Para esta tarefa, colocar os ingresos en vehículos de investimento pode ser axeitado.

Os dous principios básicos da xestión de ingresos son o aforro elevado e a acumulación de activos interiores por parte do goberno. Estes principios xorden da análise económica básica do aforro, que pode resumirse na coñecida “hipótese da renda permanente”. Dende a perspectiva desta hipótese, un goberno racional que reciba un fluxo de ingresos inesperado procedente da explotación dos recursos naturais debería utilizado de xeito que distribúa o correspondente aumento no consumo entre a xeración presente e as xeracións futuras. Para poñelos en práctica, a literatura propón diversas solucións, que van

dende as políticas fiscais destinadas a suavizar o perfil temporal do gasto ata as políticas macroeconómicas destinadas a estabilizar o tipo de cambio. Unha destas solucións consiste en retirar por medio de impostos unha parte significativa da renda extraordinaria que proporcionan as situacións favorables nos mercados mundiais de recursos e acumulalas en forma de fondos soberanos. O papel destes fondos soberanos pode ser múltiple: aforrar para as xeracións futuras, estabilizar a economía no curto e medio prazo, ou asignar os investimentos públicos estratéxicos. O obxectivo desta tese é o de investigar un caso particular de fondo soberano, o Fondo Nacional creado para xestionar os ingresos obtidos da extracción de petróleo na República de Kazajistán (RK). Esta república independizouse da Unión de Repúblicas Socialistas Soviéticas (URSS) en 1990, e dende entón seguiu un activo programa de reformas destinado a establecer unha economía de mercado libre a través da privatización de empresas públicas e a liberalización. Debido a abundancia de recursos naturais dos que dispón a RK, a perspectiva da súa estratexia económica de reformas é o intento de diversificar a súa produción e exportación, para poder integrarse na economía global nun papel que vaia alén do de produtor de recursos primarios.

O obxectivo do primeiro capítulo da tese é o de avaliar a idoneidade do deseño do Fondo Nacional para erixirse en ferramenta que contribúa ao financiamento da estratexia enriba descrita, tendo en consideración o deseño e os resultados do conxunto de fondos soberanos existentes en todo o mundo. O Fondo Nacional da República de Kazajistán (FNRK) foi creado no ano 2000 como un fondo mixto que persegue os tres diferentes tipos de obxectivos descritos no parágrafo anterior. Creouse seguindo o deseño do Fondo Público de Pensións de Noruega (antes coñecido como Fondo

Petroleiro de Noruega), se ben con importantes diferencias con respecto do mesmo, tanto no seu deseño como no seu funcionamento. Así, no referente o deseño, a xestión do FNRK é máis complexa, involucrando, ademais do goberno e o banco central (como no caso noruegués), outras institucións como o Majlis (parlamento) e a administración presidencial, e tamén máis opaca, ao non publicar a totalidade dos informes sobre as actividades do Fondo. Polo que respecta ao funcionamento, o FNRK non acumulaba a totalidade dos ingresos derivados do petróleo como no caso noruegués, senón só unha porcentaxe dos mesmos, máis todos os ingresos, obtidos por unha lista pechada de compañías, que se considerasen como extraordinarios en situacións nas que os prezos fosen favorables. Por outra banda, mentres que o fondo noruegués concéntrase nos obxectivos de aforro e estabilización, cunha atención especial ao impacto ambiental das extraccións petrolíferas, o FNRK dedica unha parte importante dos seus recursos a financiar a estratexia xeral de desenvolvemento da RK, determinada pola administración presidencial, que non adoita prestar unha consideración especial ao medio ambiente. Os investimentos nesta estratexia canalízanse a través de institucións creadas para o efecto como o “fondo para o benestar” Samruk-Kazyna, que actúa como matriz de estruturas empresariais tipo *holding* en sectores considerados estratéxicos, ou o fondo de investimento Baiterek, encargado de transmitir fondos ao sector privado a través dun conxunto de entidades bancarias reguladas.

O FNRK constituíse nun período de prezos elevados para o petróleo, e inicialmente o seu deseño contemplaba que os seus activos só podían utilizarse de acordo con tres liñas de gasto: devolución de impostos e outras taxas ás compañías que aportaban ao Fondo, transferencias extraordinarias aos orzamentos nacionais e locais

aprobadas pola administración presidencial, e cos custos asociados coa xestión e supervisión do propio Fondo. Porén, a necesidade de compatibilizar os obxectivos de aforro e estabilización levou a reformar dúas veces o deseño do FNRK nun breve período de tempo.

A experiencia co deseño inicial amosou a fragilidade do procedemento polo que determinaban as cantidades transferidas dende o FNRK aos orzamentos públicos, susceptible de ser manipulado politicamente por parte das administracións potencialmente receptoras. Co fin de favorecer a acumulación de recursos cara as xeracións futuras, en 2006 aproximouse máis o deseño do Fondo ao modelo noruegués, dirixindo cara ao mesmo a totalidade dos ingresos que proveñen do petróleo, e transferindo despois dende o Fondo ao orzamento da RK os fondos necesarios para evitar déficits orzamentarios excesivos. Porén, o excesivo recurso a este tipo de transferencias que provocou a crise financeira global iniciada en 2007, obrigou a reformar de novo o sistema en 2010 e converter o importe anual das mesmas nunha cantidade fixa revisable.

Os atrancos no funcionamento do FNRK proveñen en boa medida de defectos nos seus mecanismos de gobernabilidade. As recomendacións do Foro Internacional de Fondos Soberanos (promovido polo Fondo Monetario Internacional), recollidas nun conxunto de principios e prácticas de adopción voluntaria, coñecidos como Principios de Santiago (por seren redactados nun cumio celebrado en Santiago de Chile no ano 2008), salientan a transparencia e a participación pública como as chaves da gobernabilidade efectiva e responsable. A transparencia é difícil de poñer en práctica nunha economía en transición como a da RK, onde a tradición da planificación central diluíu a distinción entre o sector público e o privado. En consecuencia, o FNRK é un participante pouco activo nas

diferentes iniciativas internacionais destinadas a promover a transparencia dos fondos soberanos. En particular, aínda que o FNRK publica un elevado volume de información sobre as súas actividades en forma de informes periódicos, estes informes son editados pola administración presidencial antes de transmitilos ao público a través dos medios de comunicación e difusión nacionais, polo que non poden considerarse completos. Unha revisión dos diferentes indicadores creados polas institucións internacionais para avaliar o grao de transparencia dos fondos soberanos indica que o FNRK é considerado menos transparente que fondos similares en economías en transición post-soviéticas como Azerbaiján.

O capítulo remata cunha proposta de mellora no deseño do FNRK baseada en dous eixos principais: a separación funcional entre a parte do Fondo destinada a cumprir coa función de aforro e a destinada a cumprir coa de estabilización, e o incremento da transparencia no uso dos recursos financeiros acumulados no fondo. Esta transparencia pode incrementarse en dous sentidos principais. Por unha banda, distinguindo con claridade no orzamento público a orixe e destino dos ingresos que proveñen das transferencias do Fondo, e por outra publicando os informes completos sobre a actividade do Fondo para favorecer a transmisión da información aos cidadáns e incrementar a participación pública.

O segundo capítulo ten como obxectivo avaliar o impacto da actividade do FNRK nas políticas de diversificación industrial intentadas na RK como un dos eixos centrais da súa estratexia de desenvolvemento. A economía da RK necesita reestruturarse e diversificarse para poder facer fronte no futuro ao eventual esgotamento dos seus recursos naturais. A diversificación é unha tarefa complexa, intensiva en capital e de gran escala, que require

grandes investimentos e medidas sistémicas de política estrutural. Nun país que goza de ganancias imprevistas grazas aos recursos naturais, un fondo soberano pode considerarse como unha das alternativas para fornecer o financiamento preciso, o que acontece efectivamente co FNRK.

Como outros países exportadores de recursos primarios, Kazajstán ten que tomar decisións acerca de que parte dos seus ingresos asignar ao investimento na economía nacional e acerca de como investilos. As dúas vías principais para diversificar a industria dun país rico en petróleo son o desenvolvemento de industrias baseadas no petróleo e a substitución de importacións. As industrias baseadas no petróleo comportan habitualmente a realización de proxectos a gran escala e intensivos en capital, moitas veces de titularidade pública. Polo contrario, as actividades que substitúen importacións son moi variadas, habitualmente pequenas e intensivas en traballo e a miúdo de titularidade privada. Aínda que as primeiras son moito máis acaídas á estrutura produtiva existente, e teñen un elevado potencial para crear e manter emprego no curto prazo, non resoven a cuestión básica da dependencia respecto do petróleo e o gas, polo que a substitución de importacións adoita converterse no obxectivo das reformas económicas nos países ricos en recursos. Porén, ten que facer fronte á escaseza de elementos cruciais de natureza privada, como o emprendemento e a asunción privada de riscos. De aí que o crecemento do sector privado sexa moi importante para a diversificación, tanto para crear emprego como para atraer investimento estranxeiro directo (IED) que poida aportar o tipo de capital e de coñecemento precisos para desenvolver industrias antes inexistentes.

A política de diversificación industrial na RK púxose en práctica a través de diferentes “plans” ou “estratexias” de alcance nacional e ambiciosos obxectivos, incorporados na chamada “Estratexia para o desenvolvemento industrial e a innovación de Kazajstán”, aprobada en 2003. Porén, na práctica a maioría dos proxectos efectivamente desenvolvidos ao abeiro desta estratexia concentráronse nas industrias relacionadas cos sectores extractivos. Ademais, a crise financeira global iniciada en 2007 contribuíu a desviar unha parte importante dos fondos inicialmente destinados á creación de novas actividades cara o mantemento do emprego e o saneamento do sistema bancario. Por último, a capacidade do FNRK para financiar o programa de reformas coa parte dos seus activos non vencellada ao cumprimento das súas funcións de aforro e estabilización, depende crucialmente da evolución do prezo do petróleo. Xa que o custo medio de produción do petróleo en Kazajstán estímase en 50 dólares EEUU por barril, precísase un prezo de polo menos \$60 por barril para que o Fondo poida sustentar o programa de industrialización.

Como resultado de todos estes factores, non é posible detectar ningún efecto significativamente positivo do financiamento procedente do FNRK sobre os indicadores obxectivo do programa de diversificación industrial durante o quinquenio 2010-2014: non se produciron nin aumentos nas taxas de actividade industrial nin diminucións nos indicadores de concentración da produción nin das exportacións acordos coa magnitude dos investimentos do FNRK.

Aínda que unha consideración das causas da inefectividade dos investimentos do FNRK é unha cuestión alén dos obxectivos fixados para esta tese, o feito de que o crecemento dos activos do Fondo dependa da evolución dos prezos do petróleo introduce serias dúbidas sobre a capacidade futura para reverter esta situación. Unha

extrapolación do comportamento dun dos prezos de referencia deste recurso primario, o do barril de petróleo tipo Brent, amosa que a tendencia previsible no curto e medio prazo deste prezo sitúase nun valor medio de \$60 por barril, que é precisamente o valor considerado como limiar para a acumulación de activos por parte do Fondo. A elevada variabilidade deste tipo de predicións implica que dentro dun intervalo de confianza razoable, os escenarios máis pesimistas inclúen valores non compatibles coa consecución simultánea de todos os obxectivos do FNRK.

O terceiro e último capítulo ten como obxectivo analizar o impacto sobre o sistema urbano da RK do traslado da capital da República dende a cidade máis grande da mesma, Almaty, a unha nova aglomeración urbana chamada Astana (“capital”, na lingua kazaja) construída a gran velocidade a partir dunha pequena vila chamada Akmola. Este proxecto, financiado parcialmente con fondos procedentes do FNRK é probablemente o máis ambicioso de todos os que se puxeron en marcha dende a declaración de independencia en 1990. A literatura sobre as diversas experiencias de relocalización de capitais que tiveron lugar no mundo despois da Segunda Guerra Mundial destaca o papel especial que estas xogan no sistema urbano como centros administrativos dotados dun valor simbólico adicional.

O capítulo comeza por describir a estrutura territorial da RK. Esta ten unha configuración sinxela, axustada as peculiares características da República pero similar ás do resto das repúblicas ex-soviéticas de Asia Central. Kazajstán é un país moi extenso e pouco poboado, cunha taxa de urbanización relativamente baixa (arredor do 50-60% dende a independencia) e unha poboación asentada en rexións relativamente compactas, situadas moi lonxe unhas doutras e comunicadas por unha feble rede interna de custoso mantemento

debido ás extremas condicións meteorolóxicas presentes na meirande parte do territorio. A estrutura urbana da RK está encabezada por un conxunto de dúas grandes áreas metropolitanas (a vella e a nova capital) e catorce cidades de tamaño pequeno-mediano que se atopan espalladas polo territorio nacional e actúan como cabeceiras administrativas (das dezaseis *oblasts* ou provincias nas que se divide a República) e localización das actividades industriais e de servizos. Por debaixo destas atópase unha rede de pequenas cidades e vilas, moitas delas vencelladas aos lugares onde se localizaron as factorías industriais nos tempos da URSS, e caracterizadas polo monocultivo industrial. A supervivencia destas cidades depende por completo da situación das factorías matrices, e cando estas teñen problemas económicos ou mesmo chegan a pechar, convértense en lugares de orixe dos fluxos de migración interna.

A construción de capitales *ex novo* é unha importante medida de política de planificación territorial, aínda que as súas motivacións abranguen habitualmente cuestións tanto xeopolíticas como socioeconómicas. As motivacións demográficas resultan particularmente interesantes, xa que ao modificar substancialmente os fluxos migratorios internos e externos do país, afectan substancialmente a configuración do sistema urbano. Un dos obxectivos da creación dunha nova capital situada no centro-norte da RK era o de intentar re-equilibrar a composición étnica nesa ampla rexión, fronteiriza coa Federación Rusa e onde a maioría da poboación era de orixe rusa na época soviética. Para acadar este obxectivo estimulouse a migración interna dos excedentes de forza de traballo nas rexións agrícolas do sur da República cara a nova capital. Outra característica demográfica relevante de Kazajstán é a súa relativa despoboación con respecto dos países veciños. Neste sentido, a nova

capital púxose en marcha ao mesmo tempo que unha política de repatriación das importantes minorías de etnia kazaja distribuídas nos países fronteirizos (Uzbekistan, Mongolia, China, Turkmenistan,...), como parte dun ambicioso proxecto de fundar o crecemento da nación sobre o crecemento da poboación de orixe kazajo.

Coa aprobación da lei de creación da nova capital, o territorio arredor da nova área metropolitana da capital declarouse como unha das nove “zonas económicas especiais” creadas no país para atraer investimentos que acelerasen o seu desenvolvemento. A cidade rapidamente converteuse na segunda máis grande do país, sobre a base dun gran número de proxectos arquitectónicos e urbanísticos. O goberno da RK seguiu unha política deliberada de ofrecer a súa capital como sede de organismos internacionais (Comunidade Económica Euroasiática, a Asociación Internacional de Capitais e Cidades dos países da Comunidade de Estados Independentes) e de grandes eventos (Xogos Asiáticos de Inverno, Exposición Internacional) para favorecer o seu crecemento. Contando co financiamento do FNRK, a través do “fondo de benestar” Samruk-Kazyna e liñas especiais de crédito, dotouse á administración local dos instrumentos financeiros requiridos para promover a creación e o desenvolvemento de pequenas e medianas empresas. Aos inmigrantes internos que desexasen instalarse na capital proporcionáronselles subvencións compensatorias polos desprazamos, así como aloxamento gratuíto e diversas medidas activas para facilitar a súa integración no mercado de traballo local.

O impacto da creación e crecemento de Astana analízase dende dous puntos de vista diferentes: o dos fluxos migratorios e o da estrutura urbana. A capital converteuse rapidamente dende o intre da súa creación no principal foco de atracción dos fluxos migratorios tanto internos como externos, pero non pode atoparse evidencia

concluínte de que contribuíse dalgún xeito a que estes fluxos fosen maiores do que serían de non ter existido. No referente ao segundo punto, o rápido crecemento de Astana reencheu un oco no sistema urbano da RK, xerado polo desproporcionado crecemento da antiga capital Almaty, que nos tempos da URSS funcionaba como cabeceira dun subsistema urbano máis amplo, que abarcaba territorios das actuais repúblicas de Kirguizistán, Uzbekistán e Tajikistán. Deste xeito, a creación da nova capital permitiu evitar que se detivese o proceso de urbanización na RK provocado polo colapso de parte da actividade industrial herdada da Unión Soviética, se ben non conseguiu evitar que evolucionase máis a modo.

En conclusión, pódese afirmar, dentro das limitacións que impón a esta tese a falla de dispoñibilidade de datos suficientes para poder realizar unha análise de impacto cuantitativa, que os defectos no deseño e a estrutura de xestión do FNRK empecen decisivamente que este poida cumprir o papel na resolución dos problemas coñecidos baixo o nome xenérico da “maldición dos recursos naturais” para o que foi creado, aínda que en casos particulares como o financiamento das medidas destinadas a favorecer o crecemento da nova capital o seu impacto poida identificarse como positivo. Aínda así, é necesario profundar no futuro na procura de datos e métodos que poidan permitir a realización dunha análise contrafactual do impacto do FNRK.



INTRODUCTION

1.1 THE NATURAL RESOURCE CURSE

The availability of natural resources, like oil and natural gas, should be valuable for a developing country. Extractive activities should generate employment and economic growth, and the revenues from their sale should provide the country with much-needed foreign exchange, as well as compensating the limited fiscal revenue that accrue to its government. However, many resource-rich economies underperform, a situation which following Auty (2002) is usually described as the “resource curse”.

It is not difficult to find historical examples of this situation from the Spanish "Golden Age" that ruined Spanish producers with rising prices and taxes¹ through the more recent cases of oil-producing countries with dismal economic performance, like Nigeria.² In today's global economy there is, in fact, a large group of countries where the bulk of the state budget revenues is generated by exports of commodities. For this group of countries, the budget revenues are largely determined by the world market prices for the exported resources. And the price for these product categories is extremely volatile and can only be predicted with very low precision. Accordingly, the budget revenues in such countries tend to fluctuate

¹ See, e.g., Álvarez Nogal & Prados de la Escosura (2007).

² For a description of the situation in Nigeria, see Sala-i-Martin & Subramanian (2008).

significantly and, as a result, the price trend for commodities determines the situation and growth prospects of the national economies.

Sachs & Warner (1995) used cross-section data to show that the countries with higher ratio of commodity exports to GDP in 1970 experienced slower growth in the following 20 years. Auty (2002) showed that natural resource rich countries have adverse experiences regarding to policies that close the economy to the outside world and create discretionary rents behind protective barriers that result in the cumulative misallocation of resources.

The literature offers several explanations about the economic effects of natural resources.³ Some of them highlight the deindustrialization processes brought about by the appreciation of the real exchange rate, the so-called "Dutch disease", following Corden & Neary (1982) and Corden (1984). Others, like Sachs & Warner (1985) and Gylfason *et al.* (1999), point to the negative effects on growth-related externalities, like those linked to "learning by doing" processes, triggered by the decline in manufacturing activities. Still other authors, like Ramey & Ramey (1995), identify the volatility of commodity prices (especially for localized resources, like oil) as the main cause of adverse growth effects caused by natural resources.

A different strand of the literature is focused on the effects of the abundance of natural resources on the quality of social and political institutions. Thus, Acemoglu & Robinson (2006) argued that natural resources make the blocking of institutional improvements attractive for political elites interested in preserving their own power, while Murphy *et al.* (1989) considered how natural resources favour the

³ For a complete survey of the literature on the resource curse see Van der Ploeg (2011).

pursuit of rent-seeking instead of productive activities.⁴ One different perspective on the same topic is that natural resource wealth can induce governments to pursue unsustainable economic policies, like excessive borrowing as in Mansoorian (1991).

A successful use of nonrenewable natural resources requires investment in assets that will be productive over time and with high social return, but these may be difficult to identify. For this task, placing revenues in investment vehicles may be appropriate, even if it does little *per se* to boost economic development. Ultimately, resource management has to be done in a manner that will support private sector investments.

The literature usually identifies two main principles for revenue management: high saving and building of domestic assets by the government. However simple these principles may seem, their actual implementation can still go wrong because of a series of reasons, like lack of fiscal discipline (too many bad projects), increased corruption and slows reforms (transparency and centralized financial control may help), patronage politics and increased conflict risk.

The historical record of managing resource revenues has been reviewed by Collier *et al.* (2010), who arrived to the conclusion that resource revenues have positive effects on economic growth in countries with good governance, while the effects are negative on average in countries with poor governance.

A good part of the literature on revenue management starts from elementary economic analysis based on the Permanent Income Hypothesis (PIH). This hypothesis provides a solution for a society

⁴ There is also an ample empirical literature showing high correlation between natural resource wealth and corruption levels. See Ades & Di Tella (1999).

wishing permanently to profit from windfall revenues to raise its consumption. Many of the theoretical approaches to this question take as a starting point the objective of using the resource revenue to give all present and future generations an equal increase in consumption. This is the rationale for the so-called “Hartwick rule” (Hartwick, 1977), which advocates saving the whole of the revenue from a depletable asset. A more conservative strategy is that advocated by the so-called “bird-in-hand” rule, which consists in placing resource revenues in a fund and consuming only the interest on the fund (Bjerkholt, 2002, Barnett & Ossowski 2003).

But revenue management is not the only thing that can go wrong in a resource-rich economy. Even if there is an effective use of revenues, resource revenues may alter the structure of the economy, displacing other tradable activities with impacts on the balance of payments (higher resource exports lead to higher imports and/or lower non-resource exports) and potentially also appreciating the real exchange rate (depending on elasticities). This situation is usually called the “Dutch disease”. The orientation of the economy to invest in exporting industries, together with the strengthening of the real exchange rate will then lead to lower growth of other industries (manufacturing in particular) and the economy as a whole. As a result, the competitiveness of the economy is significantly reduced. Attempts to slow the growth rate of the national currency lead to an increase in foreign exchange reserves and, consequently, to an additional issue of money far in excess of the needs of the economy, unbalancing the monetary system and accelerating inflation. In economies suffering

from this disease the quality of economic policy significantly decreases, slowing GDP growth⁵.

There are two approaches to the empirical research on the Dutch disease. The macroeconomic approach has led to successful confirmation of the existence of the disease by e.g. Bruno & Sachs (1982), Sachs & Warner (1997), or Papyrakis & Gerlagh (2004).⁶ On the other hand, quasi-experimental within-country evidence is very scarce, and in the few cases where it is available, like e.g. for Brazil in Caselli & Michaels (2009) it shows very small effects of oil discoveries and exploitation on non-oil GDP.

To address the economic problems associated with the abundance of natural resources, the literature proposes several solutions, which go from spending-smoothing fiscal policies to flexibility-increasing microeconomic policies all the way through currency-stabilizing macroeconomic policies. A more direct approach usually promoted by many governments in resource-rich countries is to try to diversify the economy through public investment. Policies that promote industries showing strong backward and forward linkages with the resource-related sectors are relatively frequent within this approach. But in other cases, governments support investment sectors not directly linked to resources through development banks or direct industrial policy.

One way to implement these solutions in practice has the state withdrawing by taxation a significant part of the windfall income provided by the favorable situation on the world resource markets, and

⁵ See Rattsø & Torvik (1999).

⁶ However, in other cases, e.g. Harding & Venables (2011), Spatafora & Warner (1995), Stijns, J.P. (2003) it has not been possible to establish empirically the existence of such a relationship.

accumulating it in special accounts or funds. The funds' accounts are separated from the annual budget and fed by certain streams of resource-related revenue. Inflows are invested in capital assets with a large share of investments going into foreign assets, and then capital income from the fund's assets may be reinvested or transferred to the annual budget.

The role of these funds can be multiple. First, they may allow future generations to benefit from the sale of natural resources by present generations. Savings in favor of future generations require the creation of a financial reserve to ease the financial burden on the future generations. To this end, governments have to withdraw part of the economy windfall revenues due to high raw material prices, and store them. This is the so-called "saving for future generations" or "parking" function of funds. It should be noted that these funds can and do accumulate as financial resources not only income from the export of raw materials, but also budget surpluses. Second, the funds can be focused on short-and medium-term stabilization of fluctuations in income and expenditure of the state budget, and in helping the additional funding of public expenditure. This is called the "stabilizing" function for funds. Third and last, funds can act in way analogous to holding companies, in order to better place strategic public investments, usually related to reformist or industrial/development policies. The advantage of using these institutional structures is that they allow the introduction of professional decision-making about spending.

Table 1. Classification of SWFs depending on the main purpose

Type	Examples	Main purpose
Stabilization Funds	Colombia, Nigeria, Chile (Economic and Social Stabilization Fund), Russia (Oil stabilization Fund)	Macroeconomic regulations with specific objectives, such as: removal of excess foreign currency and regulation of the national currency, regulation of the budget surplus, preventive conservation and sterilizing funds
Saving Funds	Canada (Alberta), Oman, Abu Dhabi Investment Authority, Libya, Russia (National Wealth Fund)	Equitable distribution of income and expenses that intend to share wealth across generations by transforming nonrenewable assets into diversified financial assets
Pension Reserve Funds	Australia, Ireland and New Zealand	Providing pension liabilities from sources other than the individual pension payments
Reserve Investment Funds	China, South Korea, Singapore's Government Investment Corporation	Management of state financial assets and reduce the negative carry costs of holding reserves or to earn higher return on enough reserves, while the assets in the funds are still counted as reserves
Strategic Development SWFs	UAE (Mubadala), Iran (National Development Fund)	Financing of socio-economic projects, usually infrastructure

Source: SWF Institute.

The decision to create such funds is usually taken by national governments, on account of their situation, and sometimes under the recommendation of international financial institutions, particularly the World Bank. Due to their public, governmental nature, they are usually identified using the collective term “sovereign wealth funds” (SWFs). Of course, institutions like the SWFs are not free from limitations in what they can accomplish, and in this case part of the limitations are embedded in their own structure. Thus, SWFs are prone to be opaque institutions, and their lack of transparency can make them easy prey for political capture. The concentration of financial wealth can make SWFs focal points for political pressure. This pressure may be applied to direct the investment decisions of the

funds in favour of local firms or specific industries that are politically well connected, independently of their economic or development performance, following the pattern described by Shleifer & Vishny (1994),⁷ and/or to appoint politically connected but financially inexperienced managers, thus reducing managerial skills at the fund due to nepotism.

The aim of this dissertation is to investigate one particular case of a SWF, i.e. the National Fund created to manage the revenues from oil extraction in the Republic of Kazakhstan. In order to understand the context of the creation of this particular fund, it will be necessary to start by describing briefly the characteristics of resource extraction in Kazakhstan.

1.2 THE REPUBLIC OF KAZAKHSTAN AS A RESOURCE-BASED ECONOMY

Kazakhstan was an agrarian, raw materials supplier in the economy of the Union of Socialist Soviet Republics (USSR). After declaring independence from the USSR in 1990, Kazakhstan's economy started a transition from the Soviet central command planning system to a market system. The first few years of Kazakhstan's independence were characterized by a sharp economic decline (mostly due to the destabilizing force of the disintegration of the USSR) that exceeded the losses experienced during the Great Depression of the 1930s. Since 1992, Kazakhstan has actively pursued a program of economic reform designed to establish a free market economy through privatization of state enterprises and deregulation, and today is

⁷ Focus on local firms is not necessarily inefficient. As Stiglitz (1993) pointed out, public subsidization of local firms may act as a substitute for underdeveloped and/or myopic financial markets.

generally considered to be more advanced in this respect than most other former Soviet countries, commonly known as the Commonwealth of Independent States (CIS) countries. The process of economic reforms in the Republic of Kazakhstan (RK) can be divided in three main stages.

The first stage of reform covered the period from independence until 1997. The country's economy still depended very much on the economic and political fluctuations at the Russian Federation. The reforms were characterized by half-heartedness and by the unsystematic pursuit of monetary and fiscal policies. The result was the focus on the establishment of an independent, secular and unitary state at the expense of a radical change of the economic system, even if liberalization of the economy and the legal framework for the implementation of market changes that were expected to bring about increases in living standards, were formally stated as priorities. The main results of this stage was the creation of the legal framework to regulate relations in the fields of taxation, budgeting, banking, foreign trade and customs (including the attraction of foreign capital), market development and market infrastructure.

The second phase of reforms corresponds to the period 1998-2004. These years were characterized by the relatively stable dynamics of key macroeconomic indicators, thus facilitating the completion of the main part of economic reforms. Kazakhstan's government designed a National Strategy in 1998 with the aim to diversify its economy and to avoid over-dependence on the oil and gas and mineral extraction sectors. The main outcomes of this phase were the following:

1. The overcoming of the negative consequences of the collapse of the old economic system, and the creation of the preconditions for growth based on the stabilization of the financial and economic situation in the country. Thus, in 2000-2003 cumulative GDP growth was 42.3% (Kazstat, 2004).

2. The completion of the regulatory framework adapted to the standards of a market economy. This was a period of high legislative production regulating the securities market, financial system, labor market, taxation, accounting, equity relationships, and many other sectors of the economy.

3. The completion of the main part of the process of denationalization and privatization of the economy and the creation of a mixed-type economy with a thick layer of private businesses. The government tried to develop small and medium enterprises (SMEs), which are specially linked to the rapid development of services, whose share in GDP grew continuously during the period.

4. The achievement of stability in the financial sector, regarding public finance, the national currency, the banking system, and the foreign exchange reserves of the National Bank of Kazakhstan (NBK). This stability was reflected in the dynamics of inflation, interest rates, money markets and government securities markets, and helped to increase significantly the scale of banks' lending to the real economy. Throughout the period from 1998 to 2004, household deposits at banks grew by 14 times. (Kazstat, 2004).

5. The intensification of investment and production processes in virtually all sectors of the economy - industry, agriculture, transport and communication, trade, etc. For the first time since independence,

and starting in 1999, there was a positive trade balance (subject to adjustments for non-organized trade).

6. The orientation of the economic system for real structural change. In particular, Kazakhstan took the lead among CIS countries in measures such as pension reform, the system of guaranteeing bank deposits, the early repayment of debt to the World Bank through the NBRK, the formation of the National Fund, the state compensation to depositors of banks and pension funds for foreign exchange losses due to currency devaluation, or the denial of mandatory sale of foreign exchange earnings by exporters. Thanks to these outcomes, Kazakhstan was the first CIS country to be recognized by the European Union (EU) and United States of America (USA) as a market economy in 2001 and 2002 respectively, and to reach investment grade status. In January 2005 the Organization for Economic Cooperation and Development (OECD) upgraded Kazakhstan's country export risks rating, moving it from the 5th to the 4th group of risks.

The main feature of the third stage in Kazakhstan's history of reforms is the design of grand development strategies, like the ones labeled as "Kazakhstan-2030" first, and "Kazakhstan-2050" later. The main economic priorities stated in these policy documents are to avoid overdependence on its oil and gas and minerals sectors, and to use the abundance of natural assets to build a modern, diversified, highly-technological, flexible and competitive economy with a high value-added component.

Already in 2003, the Strategy for Industrial and Innovation Development of Kazakhstan was approved. The main objective of this strategy was to achieve sustainable development through economic

diversification. This Strategy envisaged the creation of institutions such as the Kazakhstan Investment Fund, the Kazakhstan Development Bank, and the Innovation Fund and Export Insurance Corporation. The functioning of these institutions should promote the development of innovative capacity and prospective high-tech projects through direct funding jointly with private investors, and the establishment of the basic elements of an innovation infrastructure.⁸

The Strategy started to be implemented in 2005, and it set a task to the creation of regional "locomotives" of economic development.⁹ An attempt was made to strengthen the measures included in the Strategy by adopting the program "30 corporate leaders". This program was focused on the implementation of major investment projects initiated mainly by private companies.¹⁰

The global financial crisis of 2007-2008 put all these strategies at risk from a very early phase. The main purpose of the anti-crisis program in 2008 was the mitigation of the negative effects of the global financial crisis on the social economic situation in Kazakhstan. Overall, the program provided an infusion into the economy of Kazakhstan of about 2.2 trillion tenge, which was about 20% of the country's GDP at the time.

⁸ Starting from 2005 Kazakhstan has been implementing in practice the UK's Extractive Industries Transparency Initiative with the aim to deliver a clear signal to the international investors community and to financial institutions that the Government of Kazakhstan commits itself to greater transparency to further improve the investment climate.

⁹ Address by the President of the Republic of Kazakhstan, Leader of the Nation N.Nazarbayev «Strategy Kazakhstan – 2050» New political course of the established state. December 12, 2012.

¹⁰ Of the 45 investment projects considered, more than 70% were proposed by mining companies and were aimed primarily at the expansion and modernization of production. By early 2009 only two projects were really implemented.

In 2010, then, it was necessary to set again a new industrial and innovative development strategy based on diversification and improvement of the economy's competitive ability, the so-called State Program of Accelerated Industrial and Innovative Development.¹¹ This Program was presented as a logical continuation of the previous diversification policies and it contained the main provisions set beforehand by the Industrial-innovation Development Strategy for 2003–2015, the Program "30 corporate leaders of Kazakhstan" and other strategic documents in the sphere of industrialization. The new course of industrialization involved not just the extensive growth of the economy, but looked to boost innovative growth by deepening diversification and trying to develop a modern high-tech industry structure (in the sense of replacing the old one inherited from the Soviet period).

The strategy defined that the promoters of big projects would be a newly created fund, JSC National Welfare Fund "Samruk-Kazyna", strategic companies in the fuel-energy and metallurgical sectors of the economy, and also strategic foreign investors. Simultaneously, the strategy contemplated as a priority the development of the sectors of the economy which are not related to the raw materials sectors, but oriented to internal and regional markets (the countries of the Eurasian Customs Union and Central Asia).

The main formal objectives of this industrialization strategy were: (1) ensuring the sustainable and balanced growth of the economy through accelerated diversification and increased competitiveness of

¹¹ The State program of forced industrial and innovative development has been approved by the Decree of the President of the Republic of Kazakhstan No.958 dated March 19, 2010. The goal of the program is to guarantee the stable and well-balanced economic growth by means of diversification and improvement of its competitiveness.

the national economy; (2) the formation of centers of economic growth on the basis of a rational territorial organization of the productive capacity; (3) ensuring the effective interaction between government and business in the process of implementation of investment projects and the development of priority sectors of the economy.

The wider perspective of this strategy was the attempt to further integrate Kazakhstan's economy into international economic relations, not just through the utilization of the ample reserves of energy and mineral resources, but also by increasing possibilities to export industrial and agricultural products.

The departure point of all these development strategies is the abundance of natural resources that makes the economy of RK resource-dependent. The estimated constant international prices of raw materials, calculated on the basis of conservative growth forecasts of world prices are used directly in the development and approval of national and local budgets.

Endowed with abundant mineral resources, Kazakhstan is in the top oil-producing countries list. Its crude oil reserves are ranked 12th in the world, and second only to Russia among former Soviet states. BP (2015) estimated Kazakhstan's proven reserves at 30.0 billion barrels in 2015, accounting for 1.8% of proven world reserves. For the sake of comparison, note that Kazakhstan's reserves are in the range of smaller OPEC members like Libya or Nigeria.¹² At current production levels, its reserve-to-production (R/P) ratio is estimated at 49.3 years, broadly similar to the world average.

¹² Kazakhstan also had proven reserves of 1.9 trillion cubic meters of natural gas in 2007 (comparable to Iraq's), but natural gas production is much lower than oil production.

Figure 1. Caspian region oil and natural gas infrastructure



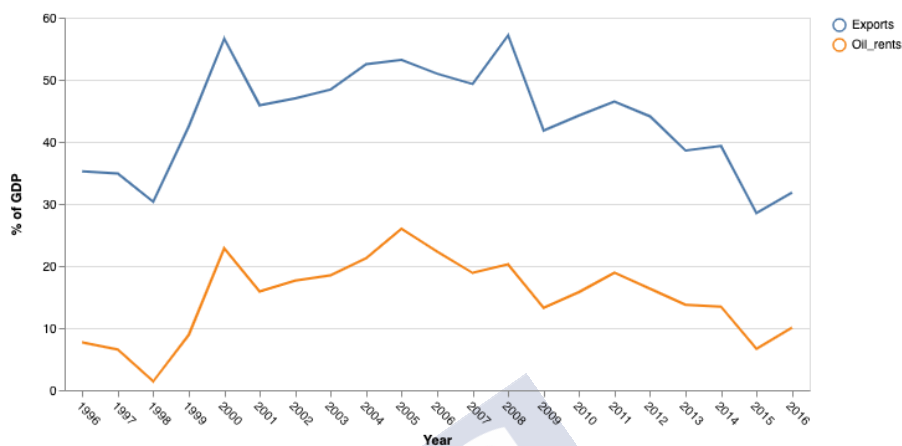
The main oilfields in Kazakhstan are Tengiz, developed by a joint venture with Chevron, Exxon Mobil and LukArco, Karachaganak, developed by a production sharing agreement (PSA) with ENI, British Gas, Chevron and Lukoil, and the largest one, the Kashagan field, where production started briefly after long delays in 2014 and has been postponed due to technical problems since, to be developed by a PSA with Exxon Mobil, KMG, Shell, Total, ENI, Conoco, and Impex,

all of them located in the western part of the country, close to or within the Caspian shelf.

The ownership structure of the oil industry in Kazakhstan is characterized by an extensive involvement of multinational companies, as a product of the fast and large-scale privatization process followed after independence and described above. In April 1993, the government of the RK signed a 40-year joint-venture agreement with Chevron and other minor parties to develop the onshore Tengiz field (considered at the time the fifth largest in the world). Later, in 1997, two PSAs were signed with international consortia to develop the Karachagank (onshore) and Kashagan (offshore) fields. Residual shares in each of these contracts were given to the state-owned company KazMunaiGaz (KMG, formerly KazakhOil).

Chart 1 shows the importance of oil exports for total exports and the trade balance. International experience shows that the dependence of the economy on the oil factor will be persistent in time. The current exploitation plans of Caspian shelf oil forecast output to reach 150 million tons in 2015-2020, which will allow Kazakhstan to enter the top ten exporters of oil, along with Iran, Mexico, Norway and Venezuela.

Chart 1. Oil and exports in Kazakhstan



Data source: World Bank. *World Development Indicators*

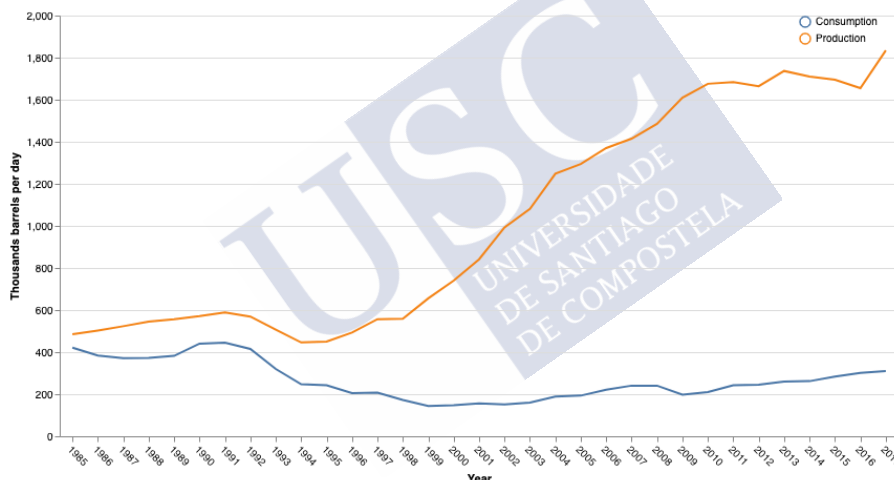
According to the IMF (2010), the oil sector dominates Kazakhstan's economy. For example, oil and gas account for about a quarter of GDP, 60% of total exports, 40% of all revenues and about three-quarters of foreign direct investment (FDI). It is expected that these ratios will rise significantly when eventually production will be restarted at the giant Kashagan field. It is predicted that after this deposit reaches peak capacity, domestic oil production will double from current levels. Chart 2 illustrates the recent evolution of the main figures related to oil production and sale in the RK.

Data from Kazstat, the Agency of Statistics of the RK, shows that the driving force of the economy is the mining industry, which provided a significant share in the formation of GDP and export earnings. In 2012, the contribution of the mining industry to Kazakhstan's GDP was about 17%, where the share of oil and gas account for almost 90% of this volume. There is an extremely high

correlation between economic growth and indicators of the mining industry.¹³

The share of manufacturing in GDP remains low. Despite all the diversification policies described above, there remains in the RK a lack of investment attractiveness for non-extractive industries, of adequate state mechanisms to ensure a favorable business climate, and of opportunities for participation of small and medium-sized businesses in the manufacturing sector.¹⁴

Chart 2. Oil supply and consumption in Kazakhstan



Data source: US Energy Information administration

The share of manufacturing in GDP remains low. Despite all the diversification policies described above, there remains in the RK a

¹³ Between the level of nominal GDP and the price of oil the correlation coefficient is above 0.9.

¹⁴ See Newspaper: A New Decade – New Economic Growth – New Opportunities for Kazakhstan. Message of the President of Kazakhstan N.Nazarbayev of Kazakhstan / Kazakhstan Pravda, January 27, 2012.

lack of investment attractiveness for non-extractive industries, of adequate state mechanisms to ensure a favorable business climate, and of opportunities for participation of small and medium-sized businesses in the manufacturing sector.¹⁵

Government revenue from the oil industry typically fluctuates with the world market price. The annual budget of most governments is a process often still driven by accounting pertaining to finance and public revenue that says little about the impact of annual flows on a government's or a country's total assets and liabilities. Hence, there is a scope for institutions that can help to guide fiscal decisions to account for the volatility of revenues and the eventual depletion of the resource that generates them¹⁶ Oil-related revenues determine the level of expenditures that can be financed sustainably. If revenues turn out to be higher than expected, the windfall should be saved and drawn down whenever revenues fall below expectations later.¹⁷ Oil revenues contribute to the economy mainly through deficit spending, as well as through secondary effects on services related to oil. The main channels of transmission of the impact on the domestic economy are budgetary accounts, in the form of annual transfers from the National Fund and the regional and local taxes in oil producing regions. Additional channels are surveys, exploration and maintenance. Oil-related revenues for local firms, especially for

¹⁵ See Newspaper: A New Decade – New Economic Growth – New Opportunities for Kazakhstan. Message of the President of Kazakhstan N.Nazarbayev of Kazakhstan / Kazakhstan Pravda, January 27, 2012.

¹⁶ The average cost in the major producing countries varies: in Saudi Arabia is estimated around \$25, the average for OPEC countries falls around \$40, in the Russian Federation it is estimated around \$45, in the USA and Kazakhstan around \$50, and in Venezuela around \$77.6. Please note that oil transactions are always denominated in US dollars (\$).

¹⁷ See Luecke (2011).

KMG, the state-owned company, are an important source of liquidity in the banking system

In the first chapter, I will start out by reviewing oil-related government revenue in Kazakhstan, in order to be able to assess the role of the National Fund in the economy of the RK.



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CHAPTER 1

THE DESIGN OF KAZAKHSTAN'S NATIONAL FUND

1.1 INTRODUCTION

Commodity-exporting countries experience problems of limited and irreplaceable resource abundance. This requires that they make a rational use of the revenues they get from resources that are non-renewable in the long run, if they want to maintain a steady level of consumption and to protect their future economic development. To this end, these countries have the opportunity to withdraw from the economy windfall revenues due to high raw material prices, and to store them in special funds.

These special funds are usually identified using the collective term “sovereign wealth funds” (SWFs). The decision to create them is usually taken by national governments, on account of their situation, and sometimes under the recommendation of international financial institutions, particularly the World Bank. While in the past these funds were labelled according to their income sources (natural resource funds, commodity funds, oil funds), or their purpose (“rainy days funds”), the term “sovereign wealth fund” has become widespread since Rozanov (2005) first used it, describing the shift from traditional

reserve management to sovereign wealth management. According to a speech by John Lipsky (2008), effective wealth management has become an important responsibility for the public sector, and as a result many countries have responded by creating sovereign wealth funds.

There is a large literature devoted to the problems of sovereign wealth funds in general, and in particular their place in the securities market. Recent research, like Mehlum *et al.* (2006) explains that the countries with well-governed and designed institutions are more likely to use their resources to improve economic and social outcomes, as a function of institutional quality. Natural-resource producing countries trying to transform resources into sustained improvements in living standards utilize SWFs to manage government revenue from exhaustible natural resources with the aim of improving development outcomes.¹⁸ In fact, there has been a focus among policymakers on upgrading and innovating the institutional toolkit at hand for resource-rich countries where governments want to transfer some or all of the revenue from natural resource extraction to their citizens through universal, transparent and regular payments.¹⁹ Particular attention has been given, e.g. by Rodriguez & Sachs (1999) to institutions that can help to mitigate resource revenue volatility, to support sustainable government spending, to manage currency appreciation, to minimize political temptation and to facilitate inter-generational wealth transfers.

Various aspects of the problems associated with the operation of sovereign wealth funds have been raised in studies by Fasano (2000), Jen (2007), Eschweiler & Fernandez (2008), Mezzacapo (2009), etc.

¹⁸ See, e.g., Gould (2010).

¹⁹ As reported by Das *et al.* (2010), or Dixon & Monk (2011).

For example, Davis *et al.* (2003) classify non-renewable resource funds in proper stabilization funds and savings funds. In the former, the aim is to reduce income volatility for the government and the economy, while in the latter the aim is to provide a reserve of national wealth for future generations. Zolotareva *et al.* (2001) consider stabilization funds as insurance institutions created by the government specifically for the purpose of smoothing costs in circumstances where it is impossible for reliable third-party institutions to insure the risks associated with changes in income.

Besides, issues addressing the impact of sovereign investment funds on the financial markets are considered by, among others, Daems (1978), Beck & Fidora (2008), Flaherty (2008), Jen & Bindelli (2008), Maslakovic (2008), Braunstein (2009), and Truman (2010). In summary, we can say that sovereign wealth funds are created by central or regional governments as investment funds for the revenues obtained from the export of non-renewable natural resources, non-primary budget surpluses of the foreign exchange reserves, or other incomes. They are managed and used in order to ensure the stability of national economies. To achieve their objectives, the funds' assets are invested in foreign financial assets. Despite the above mentioned differences between stabilization and saving (also called future generations) funds, in general they are focused on smoothing costs (with stabilization funds focused on the short term, saving funds on the long term).

Several authors like, e.g., Truman (2008 and 2010) discuss transparency issues relative to sovereign wealth funds. According to the Generally Accepted Principles and Practices (GAPP), usually known as the Santiago principles, SWFs are special purpose investment funds that are owned by the government for

macroeconomic purposes. SWFs hold, manage, or administer assets to achieve financial objectives, and use a set of investment strategies that include investing in foreign financial assets. From this wide perspective, then, SWFs are a heterogeneous group, comprising fiscal stabilization funds, reserve investment corporations, savings funds, pension reserve funds without explicit pension liabilities and development funds.²⁰

The GAPP include the following as guiding objectives for SWFs: to help maintain a stable global financial system and the free flow of capital and investment; to comply with all applicable regulatory and disclosure requirements in the countries in which they invest; to invest on the basis of economic and financial risk and return-related considerations; and to have in place a transparent and sound management.

1.2 SWFs IN THE WORLD

The International Working Group of Sovereign Wealth Funds was established in 2008 at a meeting of countries with SWFs in Washington, D.C., facilitated and coordinated by the International Monetary Fund. The IWG has reached agreements on a set of optional practices and principles within three key areas: the funds' legal and macroeconomic framework (established by the general government for macroeconomic purposes, SWFs are created to invest government funds to achieve financial objectives); governance and institutional

²⁰ The definition of SWFs according to the Santiago principles explicitly excludes foreign currency reserve assets held by monetary authorities for the traditional balance of payments or monetary policy purposes, operations of state-owned enterprises in the traditional sense, government-employee pension funds, and assets managed for the benefit of individuals.

structures (SWFs are owned by the general government, which includes both central government and subnational governments); and investment and risk management practices (the investment strategies include investments in foreign financial assets, so it excludes those funds that solely invest in domestic assets).

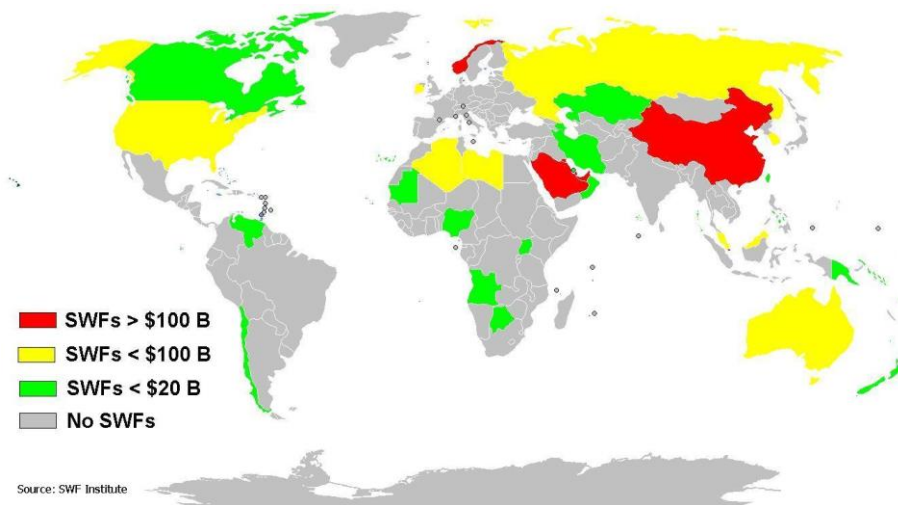
Table 2. SWFs market share by country and region.

	US\$ billion	% share
By country		
China	1,490	29
United Arab Emirates	816	16
Norway	664	13
Saudi Arabia	538	10
Singapore	406	8
Kuwait	296	6
Russia	150	3
By region		
Asia	2,003	39
Middle East	1,797	35
Europe	955	18
Africa	197	4
Americas	157	3

Data source: SWF Institute

The main key considerations about the workings of SWFs are reflected in the Santiago Principles, agreed to by the SWFs in 2008 following extensive consultation. The standing implementation of the Santiago Principles underscore the positive impact that SWFs can make to global prosperity and stability.

Figure 2. World map of the Sovereign Wealth Funds.



In practice, strategic and development funds, a number of reserve funds and even active stabilization funds place investments in national assets. These domestic investments may be performed on a regular basis, and funds can even place investments in domestic bank deposits to contribute to finance budget deficits.

The policy objectives of SWFs vary, depending on the broad macro fiscal objectives that they aim to address. Their organizational structure needs to have a clear separation of responsibilities and authority. As such, a well-defined structure builds a decision-making hierarchy that limits risks by ensuring the integrity of and effective control over SWF management activities (Santiago principles, GAAPs 1-16).

From the current top 50 sovereign wealth funds, 22% of them were launched before 1990, 14% in the 1990-1999 period, and 64% were launched in 2000-2012. From the start of 2008 till the end of

2012, SWFs assets grew by 59.1% and more than 32 SWFs were created from 2005 to 2012.

SWFs are usually distinguished by their funding sources and purpose. In terms of funding, three types of sources stand out:

Table 3. Ranking of the largest SWFs.

Fund	Country	Assets (\$ bil.)	Inception year	Source
Government Pension Fund Global	Norway	1074.6	1990	Oil
China Investment Corporation	China	941.4	2007	Non-Commodity
Abu Dhabi Investment Authority	UAE-Abu Dhabi	683.0	1976	Oil
Kuwait Investment Authority	Kuwait	592.0	1953	Oil
Hong Kong Monetary Authority Investment Portfolio	China-Hong Kong	522.6	1993	Non-Commodity
SAMA Foreign Holdings	Saudi Arabia	515.6	1952	Oil
SAFE Investment Company	China	441.0	1997	Non-Commodity
Government of Singapore Investment Corporation	Singapore	390.0	1981	Non-Commodity
Temasek Holdings	Singapore	375.0	1974	Non-Commodity
Public Investment Fund	Saudi Arabia	360.0	2008	Oil
Qatar Investment Authority	Qatar	320.0	2005	Oil & Gas
National Social Security Fund	China	295.0	2000	Non-Commodity
Investment Corporation of Dubai	UAE-Dubai	233.8	2006	Non-Commodity
Mubadala Investment Company	UAE-Abu Dhabi	226.0	2002	Oil
Korea Investment Corporation	South Korea	134.1	2005	Non-Commodity

Source: SWF Institute

1. Commodity Funds (e.g. Norway Government Pension Fund formed from oil revenues; Social and Economic Stabilization Fund and Pension Reserve Fund in Chile formed from the proceeds of

copper; Reserve Fund and National Welfare Fund of Russia formed by revenues from oil, gas and petroleum, etc.). Commodity Funds are largely oil and gas related, although some funds are also based on revenues from metals and minerals. Most commodity revenues are generated either directly through state-owned companies or commodity taxes. Commodity revenues are viewed as a “source of wealth” as they represent net national saving by their sponsor government and are usually established for budget stabilization and wealth sharing across generations.

2. Non-commodity Funds (e.g. GIC, KIC, HKMA Exchange Fund). According to Fernandez (2008), they are based mainly on fiscal sources and foreign reserves. Fiscal sources can come from fiscal surpluses, proceeds from property sales and privatizations (e.g. Estonia) or transfers from the government’s main budget to a special purpose vehicle. Most fiscal sources are “real wealth”, although some have liabilities. (e.g. China is funding the transfer of foreign reserves from the central bank to CIC by issuing government bonds). Foreign reserves represent often “borrowed wealth” as the reserve build-up in many countries stems from sterilized foreign exchange interventions, in which case the central bank issues interest-bearing liquidity notes to fund the interventions and mop up the excess liquidity (e.g. Chad). However, part of the foreign reserves may also represent “real wealth”, thanks to asset appreciation and the accumulation of interest income. The share of foreign reserves managed by SWFs is typically viewed as “excess” reserves as it exceeds the portion of foreign reserves deemed necessary for the conduct of foreign exchange policy and precautionary reasons.

To tackle the challenges associated with the use of revenues from natural resources, several countries have introduced stabilization funds

– a fiscal instrument to save and set aside a certain amount of revenues for the future when they are needed in stabilizing their economies – since the first establishment in 1953 in Kuwait. Indeed, several definitions of stabilization fund are used in the literature. Balding (2012), for example, define it as “a government account designed to smooth public expenditures and compositions by setting aside revenue during periods of rapid growth that then could be drawn on during economic contractions”. In general, the purpose of stabilization funds, especially in resource – rich economies, is to buffer negative shocks on government expenditure caused by sharp declines in resource prices and the subsequent resource-related revenues.

Against this background, a key issue is whether or not a stabilization fund works in practice as a cushion to mitigate the fluctuations in government spending. It is often discussed in the literature that having a stabilization fund in itself does not address the issue of expenditure smoothing, so what matters is its design, including clear rules on asset accumulation and investment, and institutional arrangement to enhance transparency and accountability of the fund (Valdés & Engel, 2000; Bacon & Tordo 2006; Asfaha, 2007; Le Borgne & Medas, 2007). Moreover, in theory, if a resource-rich country maintains sound and appropriate fiscal policy to manage natural resources, the country might not need to establish a stabilization fund to separate the revenue and expenditure cycles. The establishment of stabilization funds is not a requisite to smooth expenditures. Indeed, empirical evidence on the effectiveness of stabilization funds on fiscal policies in general, and expenditure volatility in particular, is rather inconclusive (Devlin and Lewis, 2005; Barma *et al.* ,2012).

The estimate result based on the main specification indicates that the volatility of government spending in countries with stabilization funds is 13 percent lower than that in countries without such funds. In most cases, robustness tests also show the negative relationship between the presence of stabilization funds and the spending volatility. The impact are found to be around 15 to 20 percent.

The impact of stabilization funds is assessed with other potential factors of expenditure fluctuations taken into account. Use of different indicators, specification and estimation methods in analysing the role of stabilization funds. (a wide range of indicators, for instant, the ones related to economic structure, real sector management and financial markets).

This classification is highly conditional, because very often these public funds are mixed, solving several problems at once. For example: stabilization-saving funds in Azerbaijan, Botswana, the US (Alaska), Kuwait, Trinidad & Tobago and Norway; saving-pension reserve in Australia, or stabilization-saving-development in Kazakhstan. At the same time, within the same fund separate branches may be allocated to separate specific purposes.

As different structures in the liability side of SWFs balance sheet result in different restrictions and constraints on SWF assets' management, it is interesting also to classify SWFs according to a liability approach in:

- Contingent Liability Funds, established to smooth out budget revenues and expenditures; sterilize excess liquidity, protect economy from overheating, Dutch disease and boom-bust cycles, designed for macroeconomic stabilization purposes by countries with budgets that are highly dependent on natural resources.

- Fixed liability funds, established to meet a fixed long-term sovereign liability mainly represented by the projected shortfall in public pension systems (e.g. French pension reserve, Ireland's National Pension Reserve Fund, Australian Future Funds and New Zealand Superannuation Fund);

- Mixed Liability Funds, that should follow a fiscal (spending) rule, and thus have a fixed obligation to make regular payments into the sponsor country's budget but without targeted terminal value. They have a relatively high degree of freedom on the asset side, lower than a newly launched fixed liability fund but higher than a mature one (e.g. Russia National Wealth Fund);

- Open-Ended Liability Funds: essentially investment corporations which can have longer investment horizons, greater risk-taking attitude and broader assets diversification.

According to Jen (2007), current funds based on income from oil and gas exports account for over 65% of the total volume of all sovereign wealth funds in the world, and the rest comes from foundations in Asia, formed by the surplus trade balance of non-commodity exports.

The legal framework of SWFs is required to promote sound institutional and governance arrangements for effective management. The legal framework should among other things (1) provide the legal form and structure of the SWF and its relationships with other state bodies including the ministry of finance and central bank; (2) be consistent with the broader legal framework of the government's budgetary processes; (3) ensure the legal soundness of the SWF and its transactions; (4) support the effective operation of the SWF and the achievement of its stated policy objectives, which should be economic

and financial in nature, and (5) promote effective governance, accountability, and transparency.

The key to the success of sovereign wealth funds is an effective management structure, focused on achieving the stated objectives. The aim of this study is to identify the key elements of the governance structure of a sovereign wealth fund and the distribution of roles and responsibilities between these elements, as well as to analyze the relationships and connections that arise between them in the management of the fund.

Note that the creation of a sovereign wealth fund should be clearly stated in national legislation. The consideration of the management of the fund in the legislation varies between countries. In most cases, law fixes the basic principles of management of the fund. (e.g., in Norway, Alberta, East Timor and the Russian Federation). However, funds in Azerbaijan and Kazakhstan were established by presidential decrees. It should be noted that the establishment of a permanent reserve fund in Alaska required a change in the state constitution. According to Johnson Calari & Rietveld (2007), the fundamental principles of management of the fund should be reflected in the law, but the investment strategy should not be included in the law, since it is necessary to be able to quickly adapt to the constant changes in the financial markets. For example, the law should define a fund as general-purpose, but should not specify the financial instruments allowed for investment portfolio parameters, reference portfolios or benchmarks. But in our opinion, it still would be better to define into law the permitted classes of financial assets, since the use of an asset in the management of a SWF largely determines the results of the financial management.

According to their legal form and their integration into the national budget system SWFs can be defined:

1. As independent legal entities established on the basis of a special law or other regulation. (e.g. Kuwait Investment Authority, Korean Investment Corporation, Qatar Investment Authority, Azerbaijan-State Oil Fund, Abu Dhabi Investment Authority in the UAE), or created on the basis of general rules of corporate law in the form of state-owned companies, (e.g. State Investment Corporation and company Temasek in Singapore, China Investment Corporation);

2. As government-owned separate cash accounts without the need to create separate legal entities (e.g. in Norway, where the Fund is actually due to the Ministry of Finance Norway at the central bank of the country, or in Russia, where the Means of Reserve Fund and National Welfare Fund are recorded in the accounts of the Federal Treasury to the Bank of Russia).

Also, SWFs can be included in the budget of the country, (e.g., in Norway, Kazakhstan and the Russian Federation).

Despite the variety of sovereign wealth funds, the management structure of each fund is, as a rule, composed of three main elements: the owner, the strategic manager, and the operational control. In accordance with one of the most important principles of GAPP, the effective operation of the fund requires that the scope of decision-making and the responsibilities between these elements were clearly delineated.

Usually, ownership of SWFs is public. The owner of the fund sets the targets for it (within the limits set by law), as well as the investment strategy corresponding with these objectives. Moreover, it implements controls to check the efficiency of the management, the

degree of compliance with the objectives, and the fund's financial position.

The underlying principles and practices of SWFs vary in the different institutional, constitutional, and legal settings existing in various countries. In practice (Davis *et al.*, 2003) is quite difficult to define an effective mechanism for the accumulation and use of the savings within a SWF. It is virtually impossible in some cases to determine the long-term value of asset prices or the size of income with reasonable certainty and also impossible to predict the duration of a particular price crisis (negative price shock). Even if a long-term asset price can be defined on the basis of historical data, it is not granted that deviations from it in the future will be temporary. These factors help to explain why some funds change their investment strategies over time. According to Al-Hassan *et al.* (2013), different legal forms may have implications for both the tax position and immunity of investments. Investments through central banks will normally be protected by sovereign immunity and may also enjoy tax privileges in recipient countries. Taxation of investments through corporate structures may depend on the extent to which these investments are viewed as an integrated part of the government's financial management. Tax treatment of SWFs investment can also depend on provisions in bilateral tax agreements (e.g., Norway has negotiated tax exemptions for its SWF investments in several bilateral tax treaties).

There is also a wide variety of primary legislation. The legislation regulating the activities of sovereign wealth funds, defines the conditions under which funds can be disposed from the fund. But it does not always contain a description of specific areas and volumes of use of these funds. As a rule, it provides that the funds may be used to

finance the budget deficit. The rules of the fund may also state that the direction and amount of use of its funds have to be approved by the Parliament or other public authority, as well as reflected in the state budget.

On the basis of international best practice, some examples of such specifications can be distinguished in various countries: protection and stabilization of the budget and the economy from excessive volatility (of incomes or exports); diversification of export earnings of non-renewable commodities; getting more return from foreign exchange reserves; help sterilize the monetary authorities' excess liquidity; increase savings for future generations; foundations for socio-economic development; sustainable long-term growth of capital for the target countries; political strategy...

Based on international experience, in most cases (Kuwait, Norway, Alaska), stabilization funds helped to increase the effectiveness of fiscal policy and reduce costs, depending on their level of budget revenues. However, the stabilization Fund of the Venezuela is an example of an unsuccessful operation where periodical changes in the rules of accumulation and use of funds led to a deviation from the original goals and actually made the stabilization fund unmanageable.

The active creation of various reserve funds by many governments, alongside with the growth of central bank reserves has become a characteristic feature of the modern financial system. The investment of these funds in financial markets around the world resulted in the formation of excess liquidity, and as a consequence, in a large increase in the value of financial assets and real estate. However, when the first signs of the financial crisis in 2007-2009

provoked problems in the U.S. mortgage sector, the liquidity situation in the financial markets reversed quickly enough.

According to most authors engaged in research on sovereign wealth funds, it is necessary that the rules and operations of such funds should be transparent, clearly defined, and that they ensure accountability and prevent the misuse of funds. Rules and procedures of formation, use and management of the funds must comply with the legislation and not be open to interpretation in order to limit the scope for discretionary decisions. It is important to disclose regularly information about the management, about income and its exemptions, the investment of its assets and the return from such investments. The activities of the fund shall be audited by an independent company, and the efficiency in the allocation of funds should be evaluated periodically. These factors are essential elements that allow the monitoring of the fund and, as a consequence, garner policy support from the society and the international investment community.

Several management models can be distinguished among SWFs: (1) Autonomous institutions (e.g., SOFAZ - Azerbaijan); (2) Ministry of Finance (e.g., Reserve Fund and National Welfare Fund - Russia); (3) Central Bank (e.g., Pula Fund - Botswana); (4) Hybrid model (e.g., Norway Government Pension Fund); (5) Involvement of the private sector (e.g., KIA, ADIA); and, (6) Strategic benchmarking (e.g., Timor - Leste Petroleum Fund).

Formation of an investment strategy is an initial and one of the most important stages in the process of management of sovereign wealth funds, acting as institutional investors.

The **first stage**, in fact is the foundation of effective management of the fund is to determine the liability profile of a fund. If possible, a

detailed definition for what purpose, when and in what amounts need to withdraw money from the fund. Thus, at this stage it appears to be whether the stabilization fund or future generations fund.

As a result, formulated goals, objectives of management, are specified to comply with the mandatory guidelines of risk and return, set limits and rules for investment that will provide a result that promote the achievement of the objectives of the Fund. That is how to be prioritized in these areas depends on how the fund will be placed.

The **second stage** of determining the investment strategy of the sovereign wealth fund is the trade-off of risk and return for investing its funds, based on the profile of the fund's obligations. An important element of this stage is to determine the investment horizon that refers to a time period in which the fund should be used where necessary to maximize its investment income. Funds for future generations investment horizon is long enough for a stabilization fund - relatively short, depending usually on the average length of a cycle in commodity prices. For funds focused on generating income, investment horizon depends on whether the rules of the fund provide for permanent preservation funds (endowments) or perhaps exhaustion Fund during use. In determining the investment horizon should take into account existing uncertainties.

For example, revenues from natural resources may be unstable. Besides, the fund may have additional, previously not peculiar to it, and usually politically motivated, commitments. Often these factors work in opposite directions. The newly discovered fields, especially in countries with large territories, often replace depleted natural resources. During the existence of the fund with him may be changes that are initiated by political forces that have vague ideas about the

need to save for future generations. Considering the above, in our opinion, it is appropriate to follow the conservative approach, focusing on the low probability of revenues to the fund in the future or reducing the investment horizon.

For successful investment fund must determine the acceptable level of risk tolerance. Preferences of a particular level of risk can be described as the maximum deviation of the actual financial results of the investment fund as expected in moments of withdrawals from the fund at the end point of the investment horizon. Or, if the investment horizon is one year, the daily fluctuations of investment income should not be a cause for concern for fund managers. However, in practice the short-term volatility of the investment income can cause problems in sovereign wealth funds. For example, especially funds who are newly established. Typically, strategic control newly established funds seek to preserve capital fund necessarily in real or nominal terms that corresponds to an acceptable level of risk is zero. In result, after receiving certain income from fund management and, consequently, reducing the "reputational" risk funds can afford to raise the acceptable level of risk when investing.

Media coverage of the negative financial results sovereign wealth funds in the short term and do not affect the level of income in the long term, often facilitated by the provision of fund managers to pressure from the owners in order to adjust the investment strategy. Ability to this situation in a professional environment is called "headlines risk".

When choosing an investment strategy most sovereign wealth funds determine for themselves quantitative benchmarks of risk and return of investments. These indicators are not necessarily reflected in

the regulations, or at least publicly documented, but fund managers are guided by them when choosing financial instruments and their combination in the aggregate portfolio, as well as the choice of passive or active modes of implementation of the investment strategy.

Main quantitative reference points of profitability and risk portfolios sovereign wealth funds are the indicators:

1. The minimum rate of return is determined by examining the implied yield on the investment portfolio and established investment horizon is usually defined as the real interest rate.

For example, minimum return on a portfolio of New Zealand Pension Fund established at the risk-free rate of interest on the New Zealand Treasury securities, plus 2.5 annual interests.

According to another example of the sovereign funds of Alaska and the Canadian province of Alberta to the possibility of these funds on the generation of future cash flows have not deteriorated, income from investment should cover domestic inflation and to maintain the real value of the investment at the same level. This requirement for reserve Alaska Permanent Fund for 10-year investment horizon minimum benchmark yield is the rate of inflation plus 5% per annum, and for the Alberta Heritage Saving Trust Fund 20-year horizon - CPI Estimate plus 4.5% per annum.

According to Norway fund the calculations on long-range real rate of return on the portfolio of investments of the fund stands at 4% per annum. Because income from fund management can be used to replenish the budget, according to the established rule, the value of the structural deficit of the state budget, calculated excluding inflows market revenues should not exceed the expected value of the annual income fund.

2. *The maximum duration* of the portfolio is set to limit the interest rate risk of the portfolios, which form the sovereign funds of bonds. In order to effectively manage portfolio duration of the portfolio must equal the length of the investment horizon.

3. *Limiting the magnitude of following error* is set in order to minimize transaction costs associated with the need to copy and index all the changes in structure. But within limits such that the deviation of the actual yield of the investment portfolio of the index return does not lead to undesirable losses as a result of market risk. For example, the following error can be reduced by means of control of the Norway fund, when the Ministry of Finance of Norway following error limit value is set at 1.5% return of the benchmark portfolio. Research on the effectiveness of the index management strategies indicate that the establishment of a following error at this level cannot lead to a significant leading or lagging income duplicated portfolio compared with the yield index.

The **third stage** of determining fund's investment strategy is developing a strategic asset allocation that mean distribution of the fund asset classes, currencies, countries or regions, credit ratings and terms of investment.

When choosing a strategic asset allocation fund targets measure with the expected ratio of "risk-reward" for various asset classes, including the correlation between the assets and liabilities of the Fund. Expected results from investing in certain types of financial assets should be consistent with macroeconomic projections and restrictions. Through a combination of asset classes with low or negative correlation may benefit from diversification.

Result of a strategic asset allocation is a set of weights of various asset classes in the investment portfolio, consistent with the objectives and funds an acceptable level of risk. According to experts, based on the activities of pension funds in the U.S., the yield on these funds 90 - 95% depend on the parameters of the distribution, the remaining 5 - 10% is the range of financial instruments to efficiently manage.

In accordance with the Capital Asset Pricing Model (CAPM) making a choice in favor of a strategic asset allocation, founder of management assumes a systematic or market risk 'beta-risk' or 'beta', which cannot be eliminated through diversification. Operations manager (deviating from the strategic allocation in a strategic manager allowed limits) seeking excess returns in relation to the 'beta' the so-called 'alpha'.

In result, strategic asset allocation is based on long-term forecasts and is the opposite of tactical asset allocation based on the adjustment of shares of individual asset classes on the basis of short-term weather conditions in financial markets.

A short investment horizon causes a high proportion of reliable fixed-income instruments in the investment portfolio. It is typical for stabilization funds, which have forced conservative strategic asset allocation with a low acceptable level of risk. Stabilization funds are intended to serve as insurance against risk insurance adopted budgets of different levels. Management of funds provided by the latter in order to ensure maximum safety and liquidity of the invested funds and receive at the same income from the investment is a secondary consideration.

Thus, the rule of the sovereign wealth fund management is largely identical to those foreign exchange reserves of central banks. The

rules are intended to ensure the maximization of the value of foreign exchange reserves in accordance with the restrictions on the magnitude of the risk. However, investments are made so as to ensure the availability of funds in case of need. In this regard, in sovereign wealth funds, with a clear stabilization function are severe limitations specified in their investment policy.

Based on the purpose of stabilization funds the traditional types of investments their funds are money market instruments, highly reliable bank deposits, and treasury bills maturing within one year, government bonds and investment credit rating with a maturity of over one year.

Funds with a long investment horizon, as a rule, funds for future generations, focused on multiplication its size, saving increase over time and therefore use a much wider range of financial assets. In order to maximize the income from the investment of these funds placed a significant portion of its assets in more risky and profitable financial assets, including equities, corporate bonds, real estate and other alternative investments. The main categories of alternative investments are investments in real estate (including infrastructure), venture capital firms, hedge funds, mutual funds, commodities, etc. Shares of asset classes characterize the investment strategy of the fund in terms of the desire to maximize returns and risk appetite.

The investment strategies of sovereign wealth funds are also using derivative financial instruments. This strategy is called portable alpha in which using derivatives in their portfolios reproduce investments in traditional asset classes traded on the open market, and the released funds are placed in alternative assets with higher potential level of additional income. It should be noted that investments in financial

instruments with high yield, especially under the category of alternative, high-risk financial losses in the short term.

To discuss the investment of SWF funds in domestic assets, let's consider briefly the example of Norway and Nigeria. In Nigeria, the growth of budget expenditures at high oil prices subsequently led to the accumulation of imbalances associated with the inability to finance the whole amount of the increased budgetary commitments during sudden and prolonged downturns in response to the external economic environment. The combination of these imbalances with a policy of using budgetary funds generated through oil revenues to finance domestic investment, including development projects, contributed to originate the deep economic crisis in which Nigeria found itself in the years 1990-1994. Based on data from the Federal Ministry of Finance of Nigeria, GDP growth was 8.4% in 1988-1990, and during the following five years GDP growth decreased to 2.4%. As a result, the country entered a deep debt crisis, which ended only after commercial lenders and the member countries of the Paris Club agreed to condone about 60% of the external debt the country had accumulated.

On the opposite side, Norway Government Pension Fund Global restricted budget expenditures and achieved positive results for the economy. The availability to tap the Fund led to a reduction of the inflation rate; reduced fluctuations in domestic demand, promoted high growth rates and a budget surplus. The Norwegian experience suggests that the presence of sovereign wealth funds cannot replace sound fiscal policy and that the lack of restrictions on budget spending leads to the loss of benefits from the operation of the funds for the budget, and for monetary policy.

Assets of sovereign wealth funds are allocated to: securities with fixed income (35-40%), shares in the open market (50-55%), and alternative investments such as hedge funds and private equity (8-10%).

The significant growth of sovereign wealth funds proved that they have become an influential class of investors in global financial markets, surpassing the volume of investment private equity funds and hedge funds, and catching up on the central banks. According to Eschweiler & Fernandez (2008), SWF assets account for something less than 2% of global financial assets and slightly less than 5% of the assets of all private pension, insurance and mutual funds. As a result, due to the huge volume of these funds their activities have a significant impact on certain types of financial assets, exchange rates and, as a whole the global financial system.

The strategic asset allocation problem is solved in different ways, depending on the conditions for the creation, updating and use of funds in accordance with:

1. The structure of import of the country in which the fund is established;
2. The structure of the external debt of the country;
3. The share of GDP of the country or region in financial instruments that invest in global GDP;
4. The share of the national market of financial instruments on a regional or global market for these instruments.

To minimize risks and increase investment income sovereign wealth funds seeking to diversify their investments when the majority of the funds performed primarily portfolio investments rather than

direct (strategic) investments. For example, the investment policy of sovereign wealth funds in Asia and the Middle East provides an active direct investment. In 2007- 2008 the sovereign funds of these countries have acquired a stake in a foreign company in the amount of 1 to 100% of the share capital amounting to more than US\$77 bn. At the same time in the company of the financial sector (banks, asset management companies, stock exchanges) had US\$57.7 bn., representing more than 74% of the total of these investments. As a rule, these shareholdings were acquired from issuers not on the secondary market. In some cases, the condition of the transaction for the purchase of shares in these companies is the consent of the investor on the waiver of the right to vote and nominate representatives to the board of directors.

According to reports from the IMF, countries exporting natural resources continue to save and invest abroad more than they consume and invest domestically. According to Davis *et al.* (2003), oil-exporting countries have reduced domestic consumption and investment to an average of 30% of the windfall revenues from exports. This is considerably less than in the 70s and early 80s of the last century, when for the above purposes these countries spent about 75% of such income. The rest of the money goes to repay external debt or is saved and invested abroad in the form of assets of sovereign wealth funds.

Sovereign wealth funds are institutional investors. Their main activities are associated with the accumulation of money and its placing in financial assets. They are similar to central banks, pension funds, insurance companies, mutual funds, private equity funds, and hedge funds, all institutions that also accumulate large sums. Nevertheless, the operation of sovereign wealth funds as investors

have certain specific features. Most of these funds do not have strong obligations and maintain a high share of foreign assets in their portfolios.

The total volume of resources accumulated in all sovereign wealth funds in the world went from \$2,6 trillion in 2008 to a projected \$9,5 trillion by the end of 2015. Since 2014 it exceeds the aggregate amount of the world's gold reserves. Thus, sovereign wealth funds have become influential categories of investors in global financial markets. Due to the significant amount of funds accumulated in sovereign wealth funds, their performance has a significant impact on certain types of financial assets, exchange rates, and in general on the domestic and global financial system.

Sovereign wealth funds have a positive impact on the global financial system. SWFs are mostly long-term investors and follow the most conservative investment strategies: carrying out large investments in shares in the fall of stock markets; investing in strict accordance with the laws of recipient countries, guided primarily by economic rather than political motives. The operation of sovereign wealth funds does not prevent competition in the financial markets, but instead creates a powerful business partner for companies that serve them from the private sector. Finally, the investments of these funds, as they exist mainly in countries with economies in transition, contribute to a partial compensation of global imbalances in the world economy, financing budget deficits and making up for the lack of investment resources in developed countries.

There are a series of potential links between SWFs and several factors driving economic growth that attract close attention.

1. As the asset pool of SWFs continues to expand in size and importance, so does its potential impact on various asset markets.
2. Some countries worry that foreign investment by SWFs raises national security concerns because the purpose of the investment might be to secure control of strategically important industries for political rather than financial gain-
3. The inadequate transparency of SWFs is a concern for investors and regulators. They want to know, for example, the size and source of funds, investment goals, internal checks and balances, and a disclosure of relationships and holdings in private equity funds.
4. SWFs do not face the same investment restrictions as central banks or public pension funds.

The experience of the sovereign wealth funds around the world shows that the fact of their creation does not solve the problems associated with the stabilization of public finances. Such funds are not an alternative to quality management of public finances and the success of their operation depends largely on the state of fiscal policies. Financial stabilization will be effective if the creation of these funds results in a reduction of budget expenditures depending on the price of oil or other raw materials. Budget expenditures should be based on income, not on temporary price increases. However, it is worth noting the positive results achieved in countries that accompanied the creation of sovereign wealth funds with limits to budget expenditures, or introduced rules restricting the size of the budget deficit and public debt.

To implement balanced macroeconomic policy, aimed at curbing the appreciation of the national currency and reducing inflationary pressures, sovereign wealth funds' assets are invested mainly abroad. Also, investments in the international financial market makes it possible to distribute the assets of the Fund for the widest range of financial instruments as a result get the greatest effect from diversification.

Davis *et al.* (2003) considered that the fund should invest only in foreign assets, i.e. placement of the fund to the national non-financial assets leads to the vibration of fluctuations in world prices of export goods in the national economy while the Fund should mitigate these fluctuations. With one hand, in the case of a raw crisis, withdrawals from the fund of the funds in circulation on a national stock market financial instruments lead to the destabilization of the market. On the other hand, the possible crisis in the national market of securities may cause a drop in the value of assets of the stabilization fund and undermine its ability to perform the role of a strategic reserve of the state. In case rising prices for the main export product of the national investment fund in the country will lead to faster growth of domestic demand exceeding supply growth and the redistribution of resources in favor of speculative segment of the domestic financial market. This will increase inflationary pressures and significantly increase the pace of appreciation of the national currency.

For example: Venezuela's Macroeconomic Stabilization Fund also known as FEM has invested in shares of state-owned enterprises and manufacturing companies of the electricity sector (the fund was carried out off-budget subsidies which led to Venezuelan companies depending on transfers from the central government budget and sovereign funds). This example shows when investing sovereign

wealth funds in securities within the country runs the risk of upsetting macroeconomic balance and a negative impact on the behavior of economic agents and the development of the economy as a whole.

Consider other examples of sovereign wealth funds are investing in national assets without apparent adverse effects on the economy and the stock market. For example, Temasek Holding is an investment company owned by the government of Singapore that was created to control stakes in companies that were previously directly owned by the government whose main aim is to maximize long-term value for the benefit of its sole shareholder - the state. As of 2008, 38% of Temasek investments were national assets. The Norwegian fund was created on the basis of resources accumulated in the accounts of insurance in accordance with the Norwegian National Insurance program. It allocates 85% of its investment portfolio in Norway. Countries such as Kuwait and Korea, in the period 2007-2009, have invested their sovereign wealth funds in stocks and corporate bonds of national issuers in order to stabilize domestic financial markets.

Separate attention should be paid to differences in the results management by sovereign wealth funds in foreign and local currency. Countries receiving substantial revenue from the export of raw materials necessarily face the strengthening of their currencies against foreign. Consequently, funds investing in foreign assets of the country receive more than modest results of placement, denominated in local currencies, compared with the results shown in foreign currency. Thus, negative exchange rate differences in the national currency from the revaluation of assets of sovereign wealth funds is a kind of payment for the presence of the country's insurance in the form of foreign assets accumulated in the funds. Changes in the value of assets

of sovereign wealth funds in the national currency have no effect on the purchasing power of the funds in foreign currency.

1.3 THE NATIONAL FUND

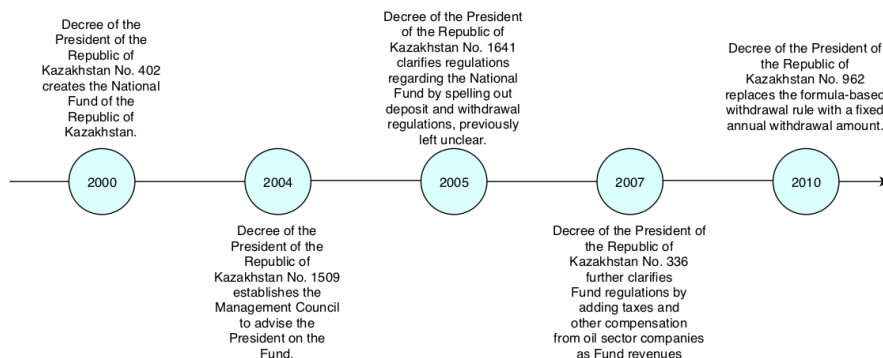
The National Fund of the Republic of Kazakhstan (NFRK) was established as an extra-budgetary institution. The main goals of the NFRK are to accumulate part of the oil revenues (a savings function), and to reduce the dependence on oil to meet budgetary needs (a stabilization function). Furthermore, the overall objective of the fund is to ensure efficient oil revenue management and transparency, in order to increase the welfare of current and future generations.

Sovereign Wealth Fund «Samruk-Kazyna» was established in order to enhance competitiveness and sustainability of national economy and prevent any potential negative impact of changes in the world markets on economic growth of the country. Samruk-Kazyna accumulates shares of major national companies, development institutions and social entrepreneurship corporations — more than 400 companies in total.

The Fund is responsible for implementing the joint action plan for stabilizing the economy and the financial system of Kazakhstan. The Fund led the governmental program to solve and stabilize the situation caused by financial crisis in Kazakhstan. The main purpose for Samruk-Kazyna is the modernization and diversification of the national economy and to provide maximum support to the Government of Kazakhstan, promptly and efficiently responding to the needs in attracting investments into the real economy, becoming more active in the regions, strengthening inter-industry and inter-

regional links and making maximum use of available advantages and opportunities (Wakeman-Linn *et al.*, 2002).

Figure 3. Chronology of the creation and development of the National Fund.



Source: Own elaboration.

The Fund is qualified to give maximum assistance to the Government of the Republic of Kazakhstan in achieving the goals on diversification and modernization of the national economy. Under this direction, the role of the Fund and its companies consists in the solution of the following strategic tasks: financing and assistance in the implementation of the projects providing an increase of the added value in the industry; financing and assistance in the implementation of the projects providing infrastructure development; establishment of new non-oil and gas production and promotion of small and average entrepreneurship development.

The Fund will invest the revenues received from asset sales, together with other finance sources, to the creation of new strategic advantages for the country and further diversification and modernization of the economy.

Currently, the Council members, appointed by the President of Kazakhstan, are the President, the Prime Minister, the Chairman of the Senate, the Chairman of the Majilis (the lower house of parliament), the Chairman of the National Bank, the Deputy Prime Minister, the Minister of Finance, and the Chairman of the Accounting Committee for the Control of the Execution of the National Budget. The Management Council sets the general governance policies and general investment strategy. Typically, the overall investment strategy is evaluated and modified once per year. While the Council sets the overall investment parameters with advice from the National Bank, the portfolio is managed by the Treasury Department of the NBK (the Council also approves, at least nominally, the uses of the fund through investment strategy proposals made by the Treasury Department of the NBK), the quarterly reports of the Fund, and the auditors. The Treasury Department also manages the foreign currency reserves of the NBK independent of the National Fund.

The management policy for the National Fund assets as a whole is within the accepted definition for “conservative”. In this regard, the main objectives of investment operations under the management of national funds in descending order of priority are: safety, maintaining sufficient liquidity, and to ensure profitability in the long term at a moderate level of risk. The structure of the National Fund assets is determined in accordance with its stated objectives.

The National Fund of the Republic of Kazakhstan was established by analogy with other countries where a substantial part of budget revenues is generated by income from exports of natural resources. It has some resemblance to the Government Pension Fund of Norway (the fund changed name in January 2006 from its previous name The Petroleum Fund of Norway).

Some fundamental differences exist between the Government Pension Fund of Norway and National Fund of the Republic of Kazakhstan (S.M., 2004):

1. The Norwegian fund performs a savings function, i.e. accumulation of oil revenues and income from investments, as well as the stabilization function of transferring the fund to the budget deficit is covered with formed as a result of non-oil sector of the economy. National Fund of Kazakhstan was originally divided into two parts - savings and stabilization.

2. The use of the Norwegian fund is carried out only on the stabilization target. Kazakhstan Fund, in addition to the cost of stabilization, also for purposes defined by the President.

3. The management system at the Norwegian fund is run by the Ministry of Finance and the Norwegian National Bank. The management system at the National Fund of Kazakhstan is very complicated. The fund is managed by: the President of the Council Fund (composed of representatives of the Parliament), the President's Administration and other authorities, the Government of the Republic and the National Bank. It should be noted also that in the approved rules governing the fund, there are no mechanisms by which the public could influence its activity.

4. All the oil revenues are directed to the Norwegian fund. To the National Fund of Kazakhstan, only 10% (a savings portfolio) is directed, as well as the excess of taxes, the resulting implementation of Kazakhstan's products at prices higher than planned. Moreover, all these transfers are carried out only on the part of enterprises according to an approved list, which in addition to oil companies, includes mining plants and some non-ferrous metallurgical companies.

5. The stabilizing function Norwegian Fund is aimed at maintaining the achieved high standards of living, which is expressed at considerable public expense. The stabilizing function of the National Fund of Kazakhstan is aimed at the average level of public spending provided by a conservative forecast of prices for Kazakhstan's raw materials.

6. The Norwegian fund pays great attention to the environmental aspect of its activities. The Norwegian Environment Facility is a part of the fund with the main goal of improving the environment. In Kazakhstan, measures for environmental protection are financed on a residual basis, as a consequence of the state focusing on social issues

7. The Norwegian fund is open to the public and its quarterly and annual reports are published on the Internet at the National Bank of Norway. The openness of the Kazakhstan stock is difficult to judge, as the report on the activities of the fund is not fully published.

Besides, the National Fund of Kazakhstan has substantial differences from other similar funds. The National Fund was established at a time when Kazakhstan was only at the beginning of the oil era. With a huge reserve of natural resources, Kazakhstan has not yet emerged at a fairly high level of its development. In Alaska, Alberta or Norway, the level of oil and gas production has almost peaked, and viewed the prospects for its reduction.

U.S., Canada and Norway belong to the group of developed countries that have achieved economic prosperity, so the standard of living of these countries is very high. National Fund of Kazakhstan was created when Kazakh society was in a deep crisis – poverty; unemployment; lower life expectancy; migration had been a hallmark of the social situation in the country.

Alaska Permanent Fund Corporation was established on the basis of a constitutional amendment adopted by referendum, which was attended by the entire population of Alaska. Funds in Norway and the Alberta were established pursuant to the statute of their parliaments. National Fund of Kazakhstan was established by a decision of the President of the Republic of Kazakhstan. The Parliament of the Republic was faced with a *fait accompli*, and it was simply asked to enact legislation to amend the budget law of the country, coupled with the creation of the fund.

The population of Alaska, Alberta and Norway took part in organizing the fund, and there is an understanding of goals and objectives established funds and a high degree of agreement on their organization. In Kazakhstan, the population almost did not take part in discussions on the establishment of the fund and its operation is carried out in an atmosphere of indifference and apathy on the part of most people. Attention is drawn to the fact that the choice of model for the National Fund was not discussed publicly and dared actually a small circle of high-ranking officials.

Economic reform is at heart of our understanding of establish the wealth fund in Kazakhstan. The first few years of Kazakhstan's independence were characterized by an economic decline that mostly due to the destabilizing force of disintegration of the Soviet Union. In this period is created of legal framework to regulate relations in the field of taxation, budgeting, banking, foreign trade, systems attracting foreign capital and customs, market development and market infrastructure.

The formation of the National Fund of Kazakhstan was in 2000, when the oil prices were rising and an economic recovery was on a

map for Kazakhstan's economy. The main purpose of the National Fund according to legal aspect were defined by Presidential Degree N402, 2000, has been defined as "... the provision of a stable socio-economic development, the accumulation of financial resources for future generations (saving function), reducing the dependence of the economy from the impact of adverse external factors (stabilizing function)".

During the years of its operation mechanism, the development of the National Fund of Kazakhstan proceeded in three stages.

First stage, from 2001 to 2005, when the legal basis of the functioning of the National Fund of Kazakhstan was launched. The following basic mechanisms of formation, management and use of the National Fund of the Republic of Kazakhstan were established:

1. The Fund's assets are concentrated in the account of the Government of the Republic of Kazakhstan in the National Bank of the Republic of Kazakhstan.
2. The National Bank of the Republic of Kazakhstan is to manage the Fund's assets
3. The volume and use of the Fund will be established by the President of the Republic of Kazakhstan, on the proposal of the Government of the Republic of Kazakhstan.
4. The Government of the Republic of Kazakhstan shall report annually to the approval of the President of the Republic of Kazakhstan's annual report on the formation and use of the Fund.

In accordance, legal aspects were defined by Presidential Degree N543, 2001, with the rules of formation and use of the National Fund

of the Republic of Kazakhstan, where the main principles of the fund were stated as part of its main objectives:

1. Saving function is to create a state savings.
2. Stabilization function is expressed in reducing dependence republican and local budgets on the world prices.

The implementation of the stabilization function transferred to the Fund the excess tax and other obligatory payments to the budget from the extraction sector approved in the republican and local budgets. On this stage of the National Fund his sources were in surplus tax payments from extraction sector, official transfers from the national budget, the investment income from the management of the fund, other receipts and income not prohibited by the legislation of the Republic of Kazakhstan and the funds from the sale of state agricultural land in private ownership. The first payment to the fund was of \$660 million paid by the U.S. company "Chevron" for a 5% stake in Kazakhstan's oil-production. At the end of 2005, the Fund had accumulated assets worth about 8.1 billion U.S. dollars, accounting for 14.5% of GDP.

For the implementation of the savings function, savings were formed by the following income flows:

- Official transfers from the republican and local budgets, calculated at the rate of 10% of planned in the republican and local budgets, the amounts of income taxes and other obligatory payments to the budget;
- Investment income from the management of the Fund;
- Other revenues and income not prohibited by the laws of the Republic of Kazakhstan.

The Fund's asset management was carried out on the basis of formed portfolios. Thus, the first phase of development of the stabilization portfolio assets were placed in money market instruments and bonds. While the assets of the savings portfolio (68.91%) of the fund were placed in money market instruments, in securities and shares. It should be borne in mind that for the calculation of return applies the basic currency of the National Foundation - the U.S. dollar, according to a report to the Budget Code is generated in KZT.

As part of the five-year indicative plan for socio-economic development of the Republic of Kazakhstan shall establish the estimated constant international prices for crude oil, copper and other commodities (these are the goods that make up a significant share of Kazakhstan's exports). On this basis, the average prices of the commodities Kazakh producers and their corresponding state budget revenues from the commodity sector used directly in the development and approval of national and local budgets.

Calculated at constant prices for commodities are set by the basis of conservative growth forecast of world prices. High world prices for hydrocarbons stimulate the expansion of oil production. During the period from 2001 to 2005 the amount of the annual oil production rose from 40 million tons to 65 million tons, export - by 32.4 million tons to 54.6 million tons. The share of revenues from the oil sector in the state budget and the National Fund for the period amounted to about 30% of total revenues.

The rules recognized three main lines of spending for the Fund:

1. To compensate for losses determined as the difference between approved and actual amounts of taxes and other obligatory

payments to the budget from the extraction sector on the special list;

2. In the form of earmarked transfers from the Fund to the republican and local budgets for the purpose defined by the President of the Republic of Kazakhstan;
3. To cover costs associated with the management of the fund and the annual external audit.

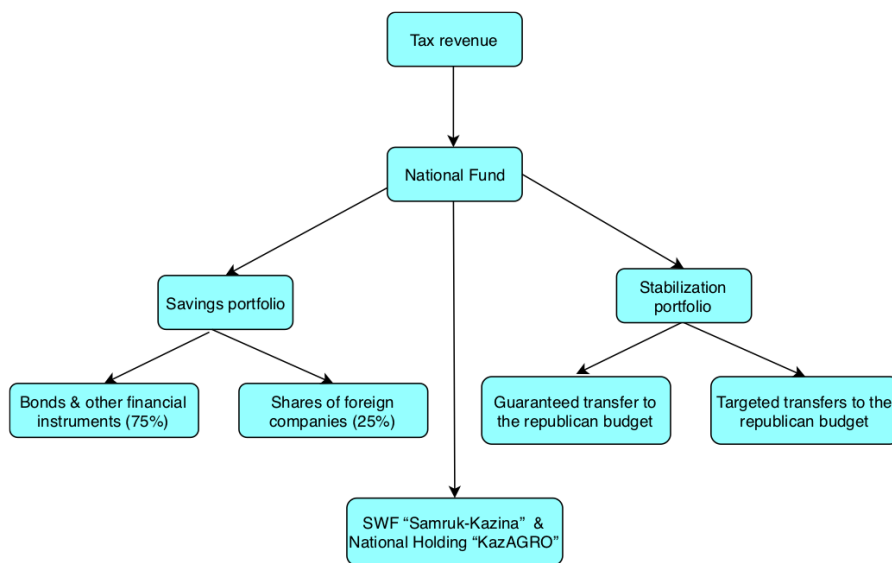
Moreover, the rules set the injunction to use the fund for lending to private or public organizations, and as security for liabilities. The Fund shall be placed in safe and liquid foreign financial assets for its savings and investment return.

The National Fund was created in fact as an independent entity operating under the trust agreement, independently carries out investment fund, including the transfer of the management of its external manager, develops and approves the rules on investment operations

Second stage: The period of "balanced budget" from 2006 to 2009. In 2006, the "Concept of formation and use of the National Fund for the medium term", that changed the procedure for the formation and use of the Fund, was adopted. In order to ensure the optimal balance of the distribution of oil receipts between the republican budget and the National Fund a method of balanced budget was developed, in which the revenues of the oil sector fully were forwarded to the National Fund, and the revenue part of the republican budget is formed only at the expense of the non-oil sector (Sartbayev & Izbasarov, 2007).

From the middle of 2006, the way to channel funds from the National Fund for the economy was through guaranteed and targeted transfers to the state budget, as well as long-term investments in domestic securities.

Figure 4. The mechanism of formation and use of the National Fund in the second stage.



Source: Own elaboration based on Sartbayev & Izbasarov (2007).

To avoid depleting the Fund, guaranteed transfers were limited to no more than one-third of the assets of the fund at the end of the year preceding the development of the national budget. Note that under Presidential Decree No. 1641, guaranteed transfers were only be used to finance the government’s development programs and not current

budget expenditures. The amount was determined using the following formula:²¹

$$G = A + bNFRK_{t-1} * E,$$

where:

G was the transfer amount;

A was a number set by law every three years based on the budget's development programs' average costs over a given period of time;

b was also a number set by law every three years based on the Fund's average investment income over a given period of time;

NFRK_{t-1} was the value of National Fund assets at the beginning of the fiscal year;

One-off withdrawals called “targeted transfers” were permitted in 2008-2009 to finance Samruk-Kazyna, a holding company for state-owned companies, and KazMunaiGas, the national oil company, during the global financial crisis. Targeted transfers totaled approximately \$7 billion.²²

The advantages of the balanced budget are that on the one hand, there is sterilization of excess money supply, and on the other there is accumulation of financial resources for the benefit of future generations. At the same time, the country may face the problem of investing these funds. The low profitability of invested assets may no longer cover the administrative costs of managing the fund.

²¹ Decree of the President of the Republic of Kazakhstan No. 1641 September 1, 2005.

²² <http://www.nationalbank.kz/index.cfm?docid=285>

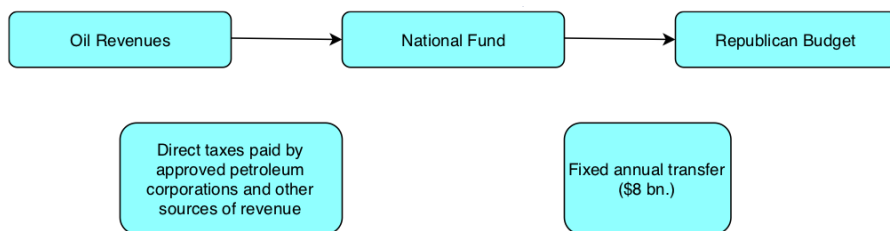
The sterilization of excess foreign exchange inflows reduces pressure on the exchange rate of the tenge and inflation. Financial reserves have been established for the active anti-crisis policy, under which the National Fund used funds of \$ 10 billion and observed accumulation policy. Funds at the end of 2009 amounted to \$ 4.5 trillion tenge, of which 750.0 billion tenge placed in domestic assets (bonds of "National Welfare Fund" Samruk-Kazyna "JSC and" National Holding "KazAgro") of U.S. \$ 24.4 billion - in foreign assets. Return of the National Fund from the beginning of creation (from June 2001 to December 31, 2009) in the base currency of the Fund (U.S. \$) was 55%, which in annual terms was 5.2%.

However, it is necessary to turn our attention to the disadvantages of the consolidation of the National Fund with the budget after 2006, which include: (1) instability of the revenue part of the National Fund due to changes in the concept of 'oil revenues' and the manipulation of the National Fund income and budget through the modification of the list of payers after the approval of the budget; (2) the government attracts loans at a higher rate than the return of National Fund investments; (3) under-investment in human capital, to allow the National Fund to save 'for future generations'; and, (4) a high level of deterioration of infrastructure in the country due to lack of investment, which creates a risk of accidents with irreversible consequences.

Third stage: The period of the fixed transfer, from 2010 to the present. Starting in 2010, Presidential Decree No. 962 introduced fixed annual transfers at \$8 billion per year, which can be used to fund current budget expenditures in addition to development programs. The transfer amount can be adjusted by 15 percent through legislation

depending on the state of the economy.²³ In this case, the guaranteed transfer was directed to finance the costs of current budgetary programs and programs development, providing investing in projects to implement measures to improve the lives of citizens, prevent the growth of unemployment, industrial and innovative development, support for small and medium businesses, and the development of agro-industrial complex among others.

Figure 5. The current mechanism of formation and use of the National Fund.



Source: Own elaboration.

According to a law passed in 2012, the amount of the transfer was increased to approximately \$9 billion for 2013.²⁴ The balance of the Fund cannot fall below 20 percent of GDP in a given fiscal year. If it does, the shortfall is to be covered by cutting the fixed annual transfer by the amount needed to cover the difference. A portion of the Fund is also withdrawn to cover the Fund's operational expenses and to pay for annual external audits.

According to the 2010 New Concept, National Fund assets must be placed in financial instruments traded in foreign financial markets and included in the list of permitted financial instruments, except for

²³ Decree of the President of the Republic of Kazakhstan No. 962 April 2, 2010.

²⁴ The Law of the Republic of Kazakhstan No. 52-V November 20, 2012.

intangible assets, that should be approved by the Government of the Republic of Kazakhstan, on the proposal of the Board of Management National Science Foundation. The restrictions do not apply to the Kazakh financial instruments acquired before January 1, 2010, which will be considered in the structure of the National Fund assets.

The dynamics of world prices has a significant impact on the debt policy of the state. The global financial crisis and the deterioration of the situation on the world oil markets decreased investors' confidence in Kazakhstan's government bonds, which led to a rise in the cost of borrowing on financial markets. In contrast to countries with diversified economies, in Kazakhstan borrowing opportunities are limited, and it is in those times when the borrowed funds could partly compensate for the reduction in budget revenues. During the financial crisis, the National Fund of Kazakhstan began to carry out new functions, including the function of protecting the credit system of the country and the investment credit function.

The importance of the mechanism of the National Fund is that it acts as an automatic stabilizer: admission to it (and, accordingly, the resources used to conduct countercyclical policies) is directly dependent on market revenues of the oil sector. However, there is no limit to the use of the National Fund in an unfavorable situation: the mechanism of the guaranteed transfer formally gives the government the right to spend any amount of the fund. Besides, it is not regulated the use of the fund in excess of the minimum "safety" of the sum in a favorable situation. Ideally, the method of forming the National Fund should provide the most complete listing of budget revenues assigned to it and prevent the inflow of income not related to fluctuations in the external environment. In accordance with the Concept of target transfers from the Fund to the republican budget may be made only

for the purposes defined by the President. However, the list of objects, which can be invested the funds received in the form of targeted transfers is quite wide. In sum, the National Fund has two temptations of spending too much resource revenue too soon, and spending resource rents less than carefully. The oil price shifting control over resource rents from parliaments to presidents has been a muddled fiscal relationship between the funds and the government budgets.

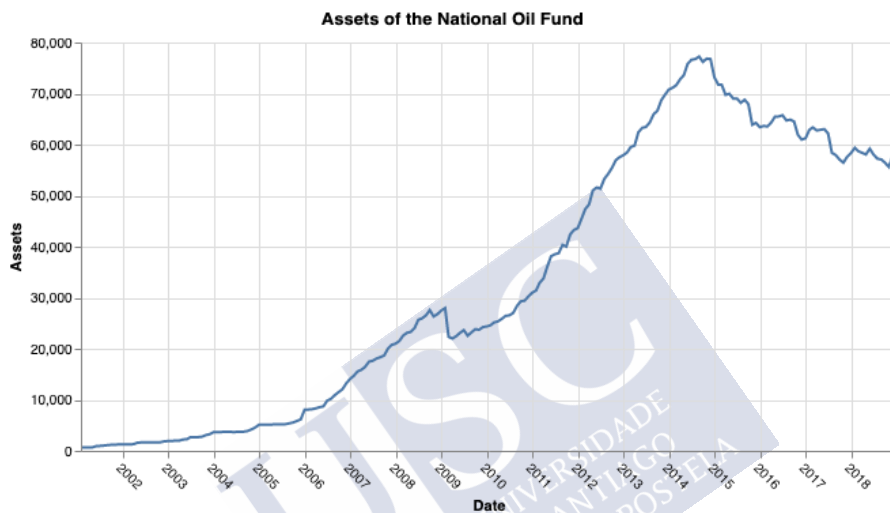
The main activities financed from the National Fund are directed: (1) to stabilize the financial sector, (2) to support housing and mortgages, (3) to support small and medium-sized businesses, (4) to develop the agricultural sector, (5) to implement innovative, industrial and infrastructure projects.

Look at the situation concerning the stabilization of the financial sector. By reducing the National Bank reserve requirements, second level banks increase the resource base at 350 billion tenge, reducing the tax burden for business release 500 billion tenge. At the same time, the Stress Assets Fund was created with an amount of 122 billion tenge. During 2009-2010 it provided additional financial support for an amount of 600 billion tenge (\$4 billion), which involved a reorientation of income commodity sector for the implementation of enhanced stabilization measures in the banking sector. Total government anti-crisis measures for two years reached about \$ 23-25 billion, one of the highest rates in the world in relation to GDO. The adoption of these measures and their practical implementation allowed maintaining the stability in the sphere of small and medium businesses.

As we saw above, stabilization and savings funds may help finance government expenditures in the long run, establishing an

institutional framework for countering the effects of highly volatile commodity prices on government expenditures. Figure 1.4 shows how between 2001-2012 assets in NFRK increased up to 46.6 times.

Chart 3. Total NFRK assets.



Data source: NFRK annual reports.

According to the National Bank, the return of the National Fund since inception, that is, from June 2001 to January 1, 2013, in the base currency of the Fund (USD) was 55%, while in annual terms it was 5.2%. At the same time, according to the Agency of the Republic of Kazakhstan on Statistics, the average inflation rate for 2003 - 2011 years was 8.6%.

Thus, we can conclude that without regular infusions of tax deductions from oil revenues and excluding exchange rate volatility National Fund would permanently lose market value. This means that the main objective of the National Preservation Fund is not performed sufficiently by effective management of its assets. Although, in

fairness, it should be noted, the market value of assets of the Fund in terms of KZT largely supported the devaluation of KZT in 2007.

After the initial establishment of the fund, direct taxes and investment income are the major sources of revenues (Chart 12). These have varied over the 2002-2012 period. Direct taxes, a function of overall economic activity and the world price of oil, have varied significantly with a steep increase in 2008 after in 2009 fall and in 2010 recovery.

The revenues and earnings are predominately in foreign currency and initially allocated to the stability portfolio. Some portions are then transferred to the savings portfolio or disbursed to the national government. (Kemme, 2012) There is a small portion of revenues denominated in KZT and these are maintained in the “Domestic Account” of the Fund and managed and controlled directly by the Ministry of Finance. Prior to the 2010 Decree disbursements were determined by a formula, the parameters of which were subject to the annual approval of Parliament. This method, however, was subject to political manipulation by potential recipients and led to rather large variability in disbursements to the budget. The National Oil Fund management had requested changes in the calculations of disbursements as early as 2004. The global financial crisis revealed the weaknesses of the system and led to the implementation of “fiscal responsibility legislation,” that was included in the “New Concept”.

1.4 THE GOVERNANCE MECHANISMS OF THE NATIONAL FUND

Transparency and public participation are the cornerstone of effective and accountable governance, strengthening credibility and policy effectiveness in a country. In turn, the lack of transparency leads to

corruption and embezzlement. One major purpose of government is to provide timely, complete, accurate and accessible information on the state budget. The democratic control of the state and of the use of public resources should put into focus the issue of budget transparency. The greatest interest is the transparency of funds, in particular access to information on expenditures and revenues of extractive industries coming into the state treasury. As a result, transparency is a key component of good governance, which plays a key role in achieving macroeconomic stability and high growth. Better control by international markets and the civil society contributes to the provision of comprehensive and reliable information on past, current and future activities of government, creating government incentives for sound economic policies and contributing to achieve greater financial stability. The emphasis of international practice is put on ensuring transparency for the central government, and for sub-national governments representing the central government, so that the state of government finances and public sector can be monitored.

Central Government requires adequate information on fiscal government operations at lower levels to be fully aware of the activities of government. This is particularly important when subnational governments have access to loans, including from international lenders. The central government is indirectly issuing contingent liabilities on the public debt of sub-national structures, and the monitoring of subnational governments in these cases is of particular importance. Fiscal responsibility legislation should contain provisions on reporting and other requirements applicable to subnational governments.

Transparency in the fiscal demands articulates the financial relations between public authorities and public corporations. For

example, since a state corporation is fully or partially owned by the government, we need a clear idea about how the transfer of profits or dividends to the government will be determined. Annual reports of the state corporation must contain information on comprehensive income retained earnings, and the amount of funds transferred to the budget should be included in annual budget documents. As well as all payments of public corporations, including taxes, royalties, dividends or profits should be reflected in the annual report of the corporation, and in the budget documentation. All payments in kind should be evaluated in the budget at their market value. Conversely, if the authorities make transfers to public corporations, they should be reflected in the annual budget. In this case, also in the budget and the annual report shall include the corporation transfers of government in favor of the corporation.

Fiscal functions must be performed by agencies of government, but as public corporations could also carry out non-commercial activities on behalf of the state, transparency in fiscal matters require a separate submission of these activities in annual reports of public corporations. Such quasi-fiscal operations could be eliminated, including the costs for them in the budget through clearly defined budget transfers of state corporations or direct budget subsidies to these operations.

The reverse situation may occur where government agencies provide commercial services and, therefore, receive income from charging commercial fees. This practice was particularly widespread in Kazakhstan economy in transition, where the tradition of central planning blurred the distinction between public and private sectors.

One basic requirement for transparency and effectiveness of the National Fund of Kazakhstan is a transparency mechanism for generating income for the National Fund. The cash flows that enter the National Fund should be sustained and easily predictable, to ensure their accountability to society in the face of the country's parliament. As a result, greater transparency in Kazakhstan would contribute to creating a stable investment climate. Laws and regulations²⁵ should provide guarantees about the transparent management of resources and accumulated wealth through the budget process

The Kazakhstan Country Updates provide information about recent developments, decisions, and civil society activities related to activities of the International Financial Institution's (IFIs) in Kazakhstan, including that of the World Bank (WB), International Finance Corporation (IFC), International Monetary Fund (IMF), European Bank for Reconstruction and Development (EBRD) and the Asian Development Bank (ADB).

In international practice, the main basic documents and initiatives to ensure transparency are:

- «The *Lima Declaration of guiding principles of control*"
International Organization of Supreme Audit Institutions

²⁵ The Bill "On Budget System" in 1996, laid the foundation for the reform of fiscal devices. The Bill "On Information" (on May 8, 2003 № 412-2) regulating relations in the field of information, development and protection of information resources and information systems, establishing the competence of government, rights and responsibilities of individuals and entities in the field of information. The Bill "On the access of citizens to public information" will be adopted in 2012, the draft law offers such items as guarantees the rights of information users and duties of information about the formation and control of the republican and local budgets, information on privileges, compensations and benefits, provided by the government and corporations, information on the size of assets of the National Bank of Kazakhstan, and the National Fund of Kazakhstan and the government (budget provision). The Bill "On accounting and financial reporting" On approving the list of forms and annual financial statements for the publication of public interest (other than financial institutions).

(INTOSAI, 1977). The Declaration proclaims as a basic principle of the independence of supervisory authority, which is perceived as independent control bodies, as the independence of the members and staff of the body, such as financial independence of regulatory authority.

- Organization for Economic Co-operation and Development's "Best Practices for Member States to ensure transparency of the state budget" are designed for use as a reference guide. Where it is recommended to carry out timely and systematic full disclosure of all relevant fiscal information, which represents a set of principles of best practice on the main budget report, the disclosure of specific information, quality and reliability.
- The Arusha 2003 Declaration of the World Customs Organization provides guidance on key elements needed to support effective national programs to ensure the impartiality and integrity of customs officials. It includes a special section on transparency, on customs laws, rules, procedures, management, assessment mechanisms and standards activities.
- «The Code of Good Practices on Fiscal Transparency" (IMF, 2007) by its nature is voluntary. The Code provided a comprehensive framework to ensure transparency in fiscal, and focuses on the definition of roles and responsibilities, transparency of budget processes, public availability of information and guarantees of reliability.
- The Open Budget Index (OBI) presents ratings of openness of budget materials for 94 countries. According to the OBI 2010 Kazakhstan ranks 38th and applies to a country that offers

minimal or incomplete information. OBI evaluates the availability of key budget documents, the completeness of their content, the level of control by the legislature and the Supreme Audit Institutions, as well as participation in the budgetary process. Creating of open budget systems can enhance the credibility and prioritization of policy decisions, limit corrupt and wasteful spending, and facilitate access to international financial markets. The (OBI) assesses the availability in each country of eight key budget documents, as well as the comprehensiveness of the data contained in these documents. The International Budget Partnership's (IBP) Open Budget Survey also examines the extent of effective oversight provided by legislatures and Supreme Audit Institutions (SAI), as well as the opportunities available to the public to participate in national budget decision-making processes.

- The Extractive Industries Transparency Initiative (EITI) is an initiative of a number of different stakeholders, designed to promote the publication of regular reports on revenue generated by the state and paid by the extractive industries sector, in relation to specific types of natural resources.

Kazakhstan joined the EITI in 2005, signing a Memorandum of Understanding in 2006, which was followed by the establishment of the National Council of stakeholders including civil society representatives, companies and governments. In total, around 97 companies participate in EITI, including KazMunaiGas, the state oil and gas company. The Coalition "Oil Revenues - Under Public Oversight" has proposed an increase in the scope of EITI, known as EITI Plus. EITI Plus envisions reports of disaggregated data, public involvement in revenue management, and the inclusion of local social

investments in EITI. Kazakhstan published its first EITI report in January 2008. However, the report did not include all oil-producing companies operating in the country. Still, the first EITI report opened up opportunities for further development on this issue. However, participation in the EITI implementation in Kazakhstan has not yet extended to all mining companies. Low public awareness about EITI is also a major problem for the fuller realization of transparency in the Republic of Kazakhstan. There must be mandatory and timely publication of annual and quarterly financial reports of companies providing information on the web sites of the Finance Ministry and the available sites of the companies. In 2010, the EITI Board reviewed Kazakhstan's validation report and designated the country as an EITI “Compliant Country” meeting all requirements in the EITI standard.

The most recent IMF Report on the Observance of Standards and Codes in Kazakhstan commended the government for its efforts to improve fiscal transparency and data dissemination. The report also indicated that there is room for further progress in budget data processing procedures. Kazakhstan has sought to expand EITI principles to public expenditures and bring accountability measures.

In sum, the NFRK makes daily, monthly, and annual reports that it submits to the Council on February 1st of each year. The Council prepares an annual report with the collaboration of the national Bank of the Republic of Kazakhstan. Then, report is submitted to the President along with a report from an independent external auditor, which was selected by the President. Information on the report and the audit is to be released to the national media. All reports go to the President, who decides the contents of their release.

The Santiago Principles have developed in an attempt to ease the accountability and transparency of the SWFs from an international perspective. Transparency and accountability improvements of the SWFs remain a core aspect of their effectiveness and their success. This is related to the international welcoming of the SWFs, and to the benefits for the domestic economies and the citizens of the respective host countries. The developed rankings and the suggested sets of best practices should be considered, acknowledging their methodological limitations and their international perspective. The involved parties and policy makers should actively work in improving these scoring attempts and identified best practices.

Kazakhstan did not take an active part in the international forum of independent funds that promotes the Santiago Principles to increase transparency and accountability in the activities of SWFs. Kazakhstan did not accept the Santiago Principles, but a transparent and accountable governance structure of the NFRK is required for the future success of the policies conducted by the fund. In light of the recent crisis it is unlikely that Kazakhstan will soon join the Santiago Principles; however, it is crucial that the Kazakhstani government and society recognize the importance of transparency towards international markets. Ultimately, the government was able to improve its position in the transparency case.

Resource rents are difficult to measure directly. For example, according to Nuttall (2010), the ratio of government oil revenue to registered oil exports provides an indication of the relative shares of governments versus oil companies across countries. According to Luecke (2011), Norway, which is often considered the global benchmark for a high government share, reached a ratio of 46% in 2008, compared to Kazakhstan's 24%. These numbers are not directly

comparable because cost structures of oil production differ and Norway and Kazakhstan are at different points in their life cycles as oil producers. Nevertheless, these numbers suggest that oil companies investing in Kazakhstan will still receive a large risk premium as compensation for entering a challenging region, in terms of political risk as much as physical geography.

The Truman index is a transparency and accountability index for SWFs. In his study (Truman, 2007), he tried to design a blueprint for SWFs in order to be able to classify them. The Truman scoreboard contains 33 elements, constructed as questions and organized in four categories. The first category is the structure of the fund, including its objectives, fiscal treatment, and indicating if it is separated from the country's international reserves. The second one concerns the governance of the fund, the roles of the government and the managers, and if the fund follows guidelines for corporate responsibility and ethical investment behavior. The third category focuses on the investment behavior of the funds. The fourth one focuses on the accountability and transparency of the fund in its investment strategy, investment activities, reporting, and audits. The Truman blueprint provides a basis for evaluating the results of the IMF sponsored dialogue on SWF best practices. Adoption of this blueprint for SWF best practices should allay many of the reasonable concerns about SWFs that have been articulated by citizens and politicians of both their home countries and the countries in which they invest. In the process, SWFs would be demystified, calming the political environment in countries receiving their investments. Moreover, the environment for SWF owners and managers would become more stable and predictable.

Other indices concerning the transparency of SWFs are available, like the Linaburg-Maduell Transparency Index that was developed at the Sovereign Wealth Fund Institute (Linaburg, 2008). This index is simple and only includes 10 principles that depict sovereign wealth fund transparency to the public. The minimum rating a fund can receive is one. In the SWF Institute Linaburg-Maduell Transparency Index, for each principle assessed there are different levels of depth and the judgment of the latter reflects the judgments and the discretion of the Sovereign Wealth Fund Institute.

The SWF Institute recommends a minimum rating of 8 in order to claim adequate transparency. The Fund has been actively working towards the provision of higher standards of transparency and accountability leading to significant improvements in the respective ranking attempts such as the Linaburg-Maduell transparency index. Of course, this is a result of the willingness of countries (governments) to disclose information about (1) scale of the fund, (2) learning and harmonization with transparency tools, and (3) cooperation with suitable regional and global organizations and initiatives.

In result, we see the scores of the different funds are a good starting point in evaluating SWFs' transparency. However, since 2008 SWFs have worked in order to increase their level of transparency and reduce the concerns of the recipient countries of their investments. In this sense, it would be interesting to recalculate the scores and analyze if there has been a real improvement.

According to Tsalik (2003), weak governance along poor transparency and accountability make the funds and the respective countries less likely to convert social expenditures into improved income. In many countries SWFs are set up following increasing

surpluses from exports of natural resources. Most of the economists discussing resource-rich economies support the view that natural wealth can pose problems for economic management. The international community and major international financial organizations have become growingly concerned about the effectiveness with which natural resource revenues are used. In particular they are concerned with the question of how funds can contribute towards long run economic and social development.

Transparency has been greater in Azerbaijan, which fully complies with the Extractive Industries Transparency Initiative and plays an active role in the International Forum of Sovereign Wealth Funds that promotes the "Santiago Principles" of transparency and accountability. Kazakhstan has not so far been involved in the International Forum although its candidacy for the EITI initiative may indicate an interest in promoting transparency. In sum, transparency increase popular confidence and a sense of ownership in the resource fund and generate popular support for a strategy to save substantial resource revenues to sustain government expenditures in the long run.

According to Tsani *et al.* (2010), the available rankings and benchmarks are largely developed based on the available public information on the SWFs. Nevertheless in some cases these facts have been confirmed with the funds themselves. In this respect the funds are called to comment on their own constituents. Hence the conflict of interests that may emerge for the assessed SWFs might bias the provided information and the derived estimation results, rankings and scoreboards.

Oil funds in Kazakhstan applied international accounting standards, as a consequence of the possibility of checking accounts by

international auditing companies. Best practices are compiled in the “OECD Corporate Governance Principles” (Gordon, 2010). The main characteristic of transparent regulatory measures is the existence of clearly defined objectives for policies based on sound legal basis with minimal duplication of functions of regulatory bodies, and that they are non-discriminatory and open to review and publicly available.

According to the IMF, procedures for internal government oversight, parliamentary oversight, judicial review, periodic regulatory impact assessment, and requirements that important decisions (including decisions to lock an investment) should be taken at high government level must be considered to ensure accountability of the implementing authorities. All countries share a collective interest in maintaining international investment policies that are open, legitimate and fair. Through various international standards, governments recognize this collective interest and agree to participate in related international accountability mechanisms.

Vertical accountability is a typical feature of fund management in both countries where the ultimate decision-making power and accountability rests with the President. Ultimately, the decisions over uses of the funds revenues become political. In case of Azerbaijan internal supervision functions are entrusted to the Supervisory Board implementing general oversight over the composition of the Oil fund assets and compliance with expenditure rules.

According to Petersen & Budina (2002), in the case of Azerbaijan, internal supervision functions are entrusted to the Supervisory Board implementing general oversight over the composition of the Oil fund assets and compliance with expenditure rules, and the Oil Fund’s budget has to be approved by the President.

On the contrary, in the case of Kazakhstan, vertical accountability is very strong despite the fact that the management council of the NBRK is formally entrusted with the management of the Fund. In practice, the President has ultimate decision-making control over the activities involving fund decisions for asset allocation, and can also decide on the uses of the Fund's assets. Some degree of horizontal accountability is present through transparency and independent audit provisions. The main drawback, however, is that the President can decide on the uses of the fund's assets without having any medium term fiscal framework approved by the Parliament.

Auerbach *et al.* (1998) developed generational accounting as a method for estimating the economic impact of fiscal policy. Generational accounting is an alternative to deficit accounting. One of the important motivations to do generational accounting is for the government to act as the collective guardian for future generations. Assessing public financial management and accountability in the context of transparency in Kazakhstan using the aggregate generational accounting method would help to understand better the extent to which government fiscal policies mitigate or exacerbate the economic risk facing different generations.

In Kazakhstan, oil fund investment strategies emphasize government bonds and other fixed income securities. It is necessary to note that fund assets are modest, compared with the volume of global financial markets, and the potential for risk diversification is limited. As a result, both countries reasonably invest in very low-risk assets (to protect the real value of their assets in the short to medium term).

1.5 A PROPOSAL FOR IMPROVING THE EFFICIENCY IN THE MANAGEMENT OF THE NATIONAL FUND

The formation and use of the National Fund are based on the following principles: (1) transparency: mandatory disclosure of approved indicators of the National Fund and reports on the formation and use of the National Fund, plus reports on the investment management of national funds; (2) completeness: reporting of the National Fund for all income and expenditure envisaged by the legislation of the Republic of Kazakhstan; (3) timeliness: credited to the cash control account of the National Fund and its transfer to the account of the Government of the National Bank of the Republic of Kazakhstan in the terms and subject to the order established by the relevant regulatory acts; and (4) efficiency, management of the National Fund on the basis of the need to preserve assets and ensure profitability in the long term at a moderate level of risk.

During the years of its operation, the National Fund was changed three times, marking three stages in its development. In the first stage (2001-2005), the Fund was launched. The first payment was of US\$ 660 million by the “Chevron” company, for a 5% stake in Kazakhstan's oil producing joint venture. In 2001, NFRK was invested US\$ 1.2 billion, in 2002 US\$ 700 million, and in 2003 US\$ 1.7 billion. Since the establishment of the National Fund, around 48% of revenues from non-oil sectors were headed into the fund. At the end of 2005 the Fund had accumulated assets worth about US\$8.1 billion, accounting for 14.5% of GDP. The second stage was the period of balanced budget from 2006 to 2009. The third stage is the period of fixed transfers, from 2010 to the present.

The mechanism of formation and use of the National Fund was established depending on the country's development priorities, taking into account macro-economic stability and fiscal policies in general, the economic situation in the country and abroad, as well as the situation in the global and domestic commodity and financial markets. The Budget Code determines the use of the National Fund and its funds are used primarily to compensate for the loss of the republican budget in the event of differences between the approved and actual income, as well as official transfers in the strategic development goals.

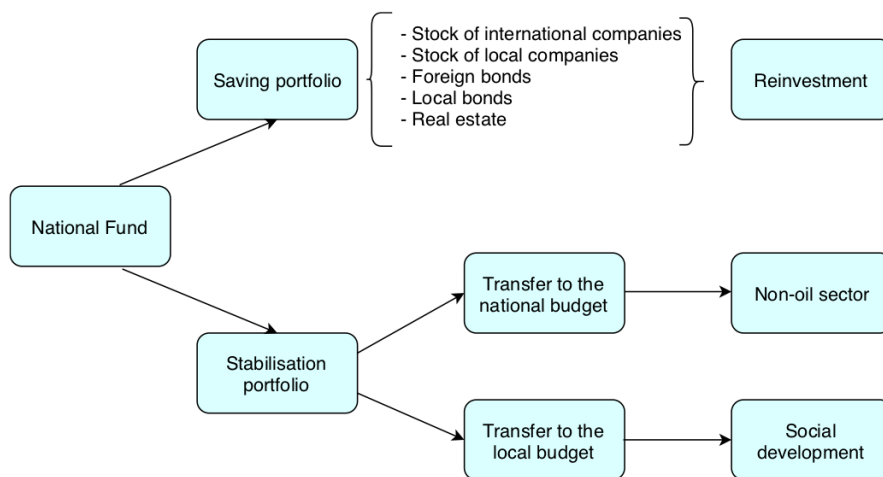
Preparation of a report on the formation and use of the National Fund is the responsibility of the Government of the Republic of Kazakhstan and the National Bank of the country on the basis of and subject to the results of the audit of the annual report on the activities of the fund. The report show annual data on income and the use of the National Fund by the activity of the National Bank of the country for the trust fund management, as well as other data on the management of the National Science Foundation.

The report on the formation and use of the fund, made in the prescribed form and in an approved manner, after the approval of the President of the Republic of Kazakhstan, is included in the information presented to the Parliament of the Republic of Kazakhstan. Information about the annual report and the results of the audit to ensure transparency of activities related to the management of the National Science Foundation are published in the media.

According to estimates of the Ministry of Economic Development of Kazakhstan (based on the forecast of socio-economic development 2011- 2020) additional savings of the existing national fund will increase to US\$40 billion in 2020, National Fund assets will increase

up to US\$90 billion in 2020, or 30% of GDP. In the baseline scenario, these assets amount to about 20% of GDP that can be realized in the implementation of an active investment policy, especially in its manufacturing industries.

Figure 6. Recommended asset control mechanism for the National Fund.



Source: Own elaboration.

In the future, the available capacities of the oil sector may not meet the growing needs of the economy, due to a possible decrease in the reproductive capacity of the resource base, its long-term industry investment cycle, depreciation and disposal of fixed assets, and the potential growth of the Kazakh economy needs. Corporations that produce oil have huge profits that are not earmarked for exploration and exported abroad in the form of accumulated excess revenues. The state should provide incentives for such investment companies and mining companies, so that they maintain certain inventory levels, as well as invest in the development of production depreciation on the Kazakh territory.

In this regard, Kazakhstan oil mining complex implementation requires the following activities:

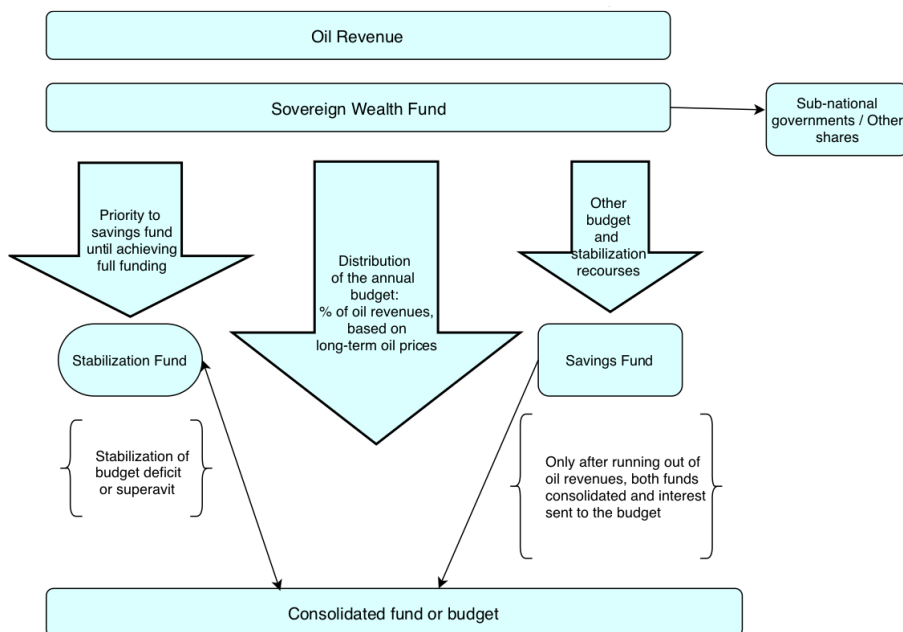
1. Attracting investment for the reproduction and development of raw materials;
2. Renewal of fixed assets in the commodity sector using the latest technological advances and technologies;
3. Use of sinking fund exclusively for the intended purpose;
4. Increase the economic efficiency of production - sales activity oil mining companies reduce costs in the areas of production, distribution and marketing of hydrocarbons;
5. Improve the financial condition of the mineral complex;
6. Ensure full financial transparency of oil mining companies to identify fully the entire amount they receive rental income.

For the government, it will be necessary to spend the fund's assets on social services such as healthcare and education, and to lend money to the prospective non-oil sector. According to Revenue Watch, transfers from the fund are aggregated and deposited along with budget transfers into one account at the Ministry of Finance, making it nearly impossible to track how the funds are spent.

According to Andrew Bauer, the analyst of the Revenue Watch Institute, in the case of Kazakhstan, the following approach is recommended. In line with the new approach on the use of funds for the next decade, where the innovation is the fixing of the guaranteed transfer to the state budget in the absolute value, funding for other types of expenses (including the selection of targeted transfers to the state budget, the purchase of securities of Kazakhstan subjects of the state, quasi-private lending to legal entities and individuals, and the

use of assets as collateral) should be prohibited. The size of the fixed annual guaranteed transfer from the National Fund of the national budget should be determined based on the expenditure patterns of the budget. In this case, the guaranteed transfer should be used to finance the current expenditure budget program and budget development programs, providing for investment in projects, the results of which will benefit future generations.

Figure 7. Proposed approach for the NFRK.



Source: Own elaboration.

1.6 CONCLUSIONS

The National Fund of the Republic of Kazakhstan (NFRK) was created in the year 2000 as a mixed fund, following on the steps of Norway’s Pensions Fund (formerly known as the Oil Fund), but with a

more complex and opaque design and more limited sources of revenue. Besides the savings and stabilization functions characteristic of the Norwegian fund, the NFRK devotes an important part of its resources to support a national development strategy decided by the Presidential administration, through *ad hoc* institutions like the “welfare fund” Samruk-Kazyna, which provides capital to holding structures in industries considered as strategic, or the investment fund Baiterek, which provides funds to the private sector through the regulated banks.

The original design of the NFRK allowed only three types of expenditures out of its assets: compensations of taxes and other fees to oil companies, extraordinary transfers to the national and local budgets under the approval and monitoring of the Presidential administration, and the Fund's management and monitoring costs. However, this design proved itself too fragile, unable to perform adequately its savings and stabilization functions, and had to be modified two times in a short period of time, as transfers to public budgets were susceptible of political manipulation by the potential recipients. In order to guarantee the savings for future generations, and following closely once more the Norwegian model, the design of the NFRK was modified to accumulate all oil revenues, transferring to the national and local budgets only the required amounts to compensate their deficits. But the global financial crisis started in 2007 turned these transfers too large, prompting a further reform, passed in 2010, that made them fixed.

All these obstacles in the workings of the NFRK stem from defects in its governance mechanisms. The Santiago principles acknowledge the importance of transparency and public participation as keys to effective and accountable governance. But transparency is

difficult in transitional economies, where central planning traditionally blurred the distinction between the private and public spheres. Accordingly, the NFRK is not a proactive institution regarding the diverse international initiatives focused on the transparency of SWFs. The Fund publishes a large number of periodical reports about its activities, but these are redacted by the Presidential administration before being disseminated among the general public in a significantly incomplete form. International SWF transparency indicators describe the NFRK as less transparent than similar funds located in post-soviet transition economies like Azerbaijan.

Improvements in the design of the NFRK have to be based on two main axes: functional separation between its savings portfolio and its stabilization portfolio and increased transparency about the use of its assets. Transparency can be increased mainly in two ways. First, by publicly tracing the source and the use of the transfers from the Fund to the national and local budgets. Second, by publishing complete and unredacted reports about the Fund's activities in order to facilitate the transmission of information to the citizens and to increase public participation.

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CHAPTER 2

THE IMPACT OF THE NATIONAL FUND ON KAZAKHSTAN'S DIVERSIFICATION POLICIES (2010-2014)

2.1 INTRODUCTION

Over time, the structure of the Kazakhstan economy has gradually shifted away from agriculture and mining industry towards services, with the manufacturing growing in importance recently. In the international division of labor, the country is an exporter of raw materials and products. In recent times, Kazakhstan is trying to overcome its economic dependence on natural resources and looking for integration in the global production system in a role different from the traditional one as a supplier of raw materials, that will allow the country to adapt gradually and more swiftly to changes in the global economy.

Kazakhstan's economy needs to diversify through restructuring, in order to be able to integrate in the global production system in a different capacity than the current one as supplier of raw materials, and eventually to cope with the exhaustion of its natural resources. Kazakhstan is important to world energy markets because it has significant oil and natural gas reserves and has become one of the

world's largest oil producers and exporters. In the international division of labor, the country is an exporter of raw materials and mining products. More than half its exports are crude oil, and metallic products are its biggest exports after oil products. This natural windfall is not an unambiguous boon for the country, because it has its own problems attached.

In accordance with the US Energy information administration database, the volume of proved and probable reserves in the Caspian basin the part of Kazakhstan is estimated at 31.2 billion bbl. Thus, at current extraction levels, Kazakhstan's reserves will be depleted somewhere in the decade starting on 2050. This poses a final horizon for the windfall revenues generated by oil extraction, and makes diversification a pressing concern, even if not immediate, given the current lack of symptoms of Dutch disease in the RK's economy²⁶, due to currency depreciation.

But this lack of current symptoms does not mean that Kazakhstan is and will be free from the bad effects of Dutch disease. In the long term, the key factor is the response of the non-oil manufacturing sectors. Oil prices are highly volatile and unpredictable. Volatility, especially regarding export revenues is a factor that tends to slow economic growth, because of its effect on fiscal revenues, the exchange rate, and asset prices (e.g. real estate prices). If output and employment decline in non-oil manufacturing sectors this leads, in the end, to deindustrialization. Investment in non-oil, non-metal products in Kazakhstan is diffculted by the volatility of oil prices, and thus economic policy has to deal with the problems of confronting cumulative causation processes, because one of the main motives that

²⁶ See Égert & Leonard (2008) and Égert (2012).

call for diversification policies is also one of the main obstacles to their implementation. The shrinking of the non-oil manufacturing sector that gives rise to boom and bust economic cycles, because during the downturn phase of the oil price cycle the non-oil manufacturing sector is unable to compensate for the decline in oil production, and thus oil price fluctuations are strongly reflected in economic fluctuations. This is sometimes called the long-term Dutch disease. In contrast, diversification usually promotes efficiency and openness to trade, two factors usually associated with rapid long-run economic growth.

There is evidence about a positive relationship between development and participation in a larger number of industries and markets. This evidence shows that economic growth is faster in countries and regions that export a diverse set of products grow (Herzer & Nowak-Lehmann, 2006; Hausmann et al. 2007; Saviotti and Frenken 2008; Hausmann & Hidalgo 2011). Kazakhstan's integration in the global production system is dictated by the enormous share (above 50%) of crude oil in its exports. Oil is a mature industry, with all its main technologies having been developed over many years (Bridge, 2008). With the exception of some specialty chemicals at the refining stage, oil is a commodity produced in bulk for a general market. The key production units in the oil industry are large firms, usually located upstream in a value chain comprising the following processes: exploration, extraction/ refining, distribution, and consumption. The oil global production system is not especially complex, and an important part of the value resides on the bottleneck stages of transportation and refining. Thus, the problems arising from excessive concentration of economic activity in a particular industry

are compounded by the low-value, high-rent, high-volatility nature of the industry.

In order to help change its role in the international division of labour, Kazakhstan is using a regional economic integration strategy which main element is the participation in the EurAsian Economic Union (EAEU). On November 27, 2009 the leaders of Kazakhstan, Russia and Belarus gathered in Minsk to sign the final agreements on the trilateral Customs Union which launched on January 1st, 2010. Armenia and Kyrgyzstan joined in 2015, the first country in January and the second in August. The establishment of the Customs Union didn't affect negatively on the talks with the World Trade Organization (WTO), which Kazakhstan finally joined in November 2015. Being a WTO member does not mean that the country cannot be a member of the Customs Union (Ustyuzhanina, 2016). The EU for instance is the best example of customs unions and member states being in the WTO as is NAFTA. The three members of the Customs Union announced that they would seek to pursue their WTO memberships individually and simultaneously and in a coordinated way following internal consultations within the working groups

Of course, the task of diversifying the economy of the RK requires, among other things, the allocation of substantial financial resources to the strategies and actions directed to this aim. In a country enjoying natural resource revenue windfalls, a Sovereign Wealth Fund (SWF) can be considered as one of the alternatives to provide the finance required and, accordingly, Kazakhstan's National Fund (NF) has been used in this role. The objective of this chapter is to describe how this was done and to get a rough approximation to an evaluation of the impact of the NF on this general strategy of the Republic of Kazakhstan's economic authorities.

2.2 DIVERSIFICATION STRATEGIES IN THE REPUBLIC OF KAZAKHSTAN

Kazakhstan, like other mineral-rich exporting countries has to make decisions about how much of its rental income should allocate to invest in the domestic economy and in what way. The formation of an investment strategy is an initial and one of the most important stages in the process of management of sovereign wealth funds, acting as institutional investors.

Kazakhstan's strategic aspiration is to become a modern, diversified economy with a high value added and high-tech component, well integrated into the global economy. The energy sector is viewed as a good basis to achieve this goal. During the Soviet period Kazakhstan was an agrarian country and raw materials supplier of the former Soviet economy, where the military industry played the dominant role. From the economic and political point of view, Kazakhstan is still perhaps the single most important Central Asian state for Russia for the following reasons:

- It is the only Central Asian state bordering on Russia.

- Ex-Soviet defense-industrial facilities, including the space launch complex and nuclear weapons testing facilities are located there.

- It possesses vast agricultural areas of strategic importance for Russia. Grain and cotton from Kazakhstan had the monopoly in the former Soviet Union.

The main economic content of the years since independence has become the transition from a centrally planned economy to a market economy. During the years of independence Kazakhstan has made considerable progress in implementing complex political, economic

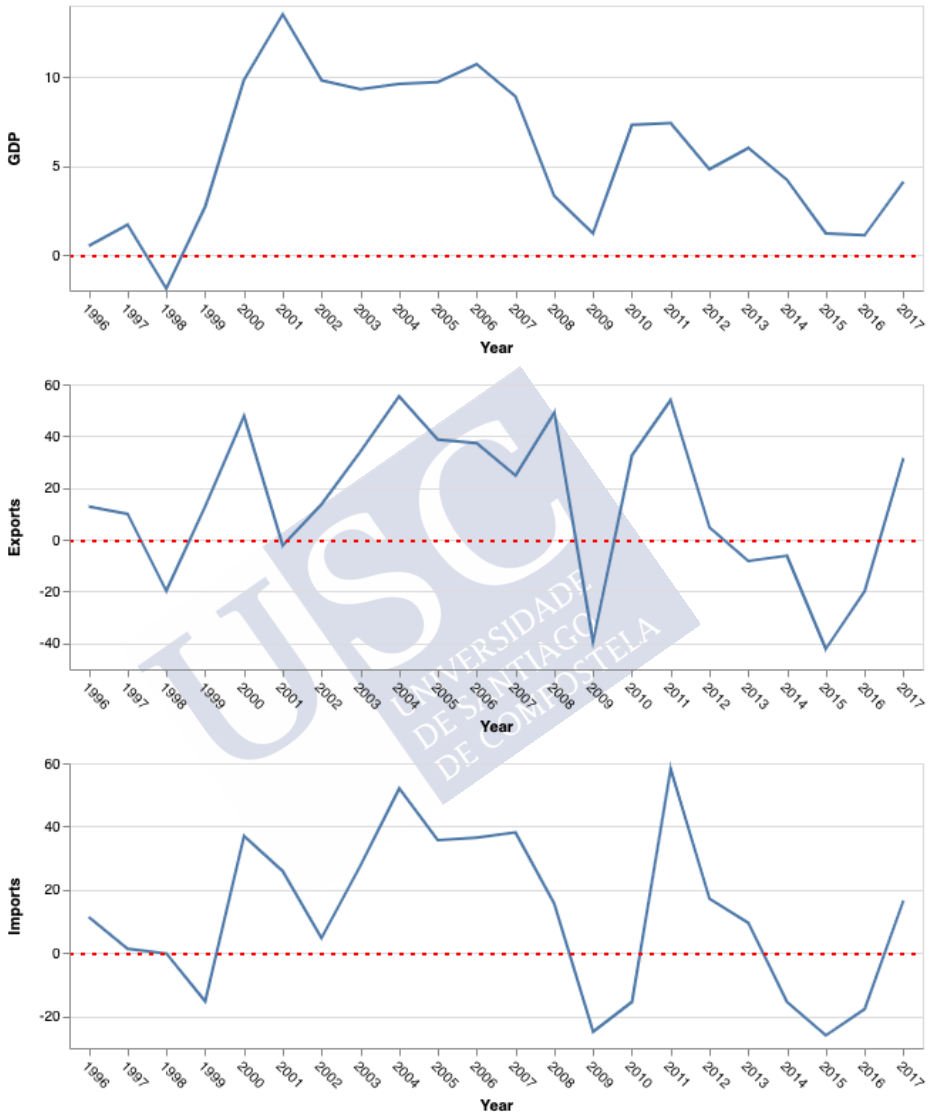
and social reforms to establish a politically stable market economy. The reform plan for former-Soviet countries endorsed by the IMF prescribed three essential steps:

-Marketization. Abolition of the government's thoroughgoing, centralized control of the economy and state planning. The decontrol of prices resulted in increases in the price level and inflation, sharply dropping living standards and posing dangers to social stability.

-Privatization. The government must get out of the business of running business, in order to inject efficiency, entrepreneurship, and rationality into the economy. Privatizing the retail and wholesale trades was relatively easy and it was accomplished without too much delay. Privatizing the industrial giants in the manufacturing sector was another matter. One problem was the reluctance of private investors to buy industrial dinosaurs incapable of surviving in an open economy. However, another problem was that massive privatization resulted in undue market concentration.

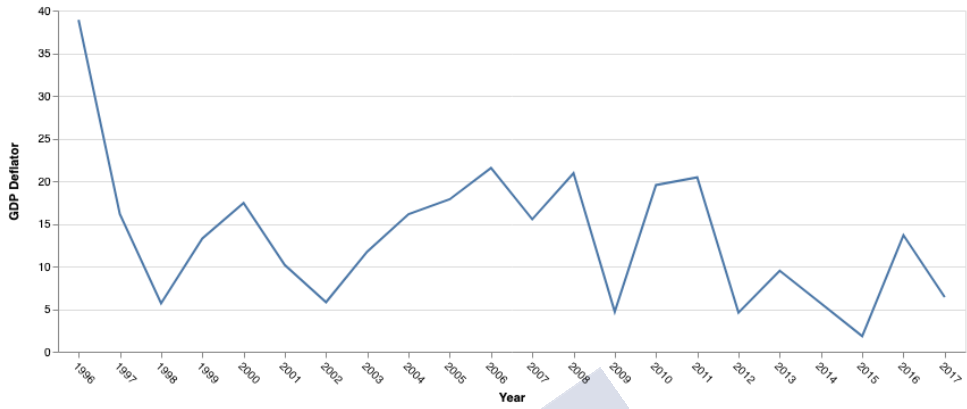
-Stabilization of the economy according to the traditional principles of macroeconomics. Here the advice is straightforward: tight fiscal restraints and a tough monetary policy to avoid hyperinflation. This implies to stop printing money to paper over burgeoning deficits, extending loans to inefficient state enterprises, and bailing out redundant, non-competitive firms; but also to cut back expenditures on health services, pensions, and other social programs and to eliminate subsidies for food, housing, heating, and electricity.

Chart 4. Evolution of GDP and trade in Kazakhstan.



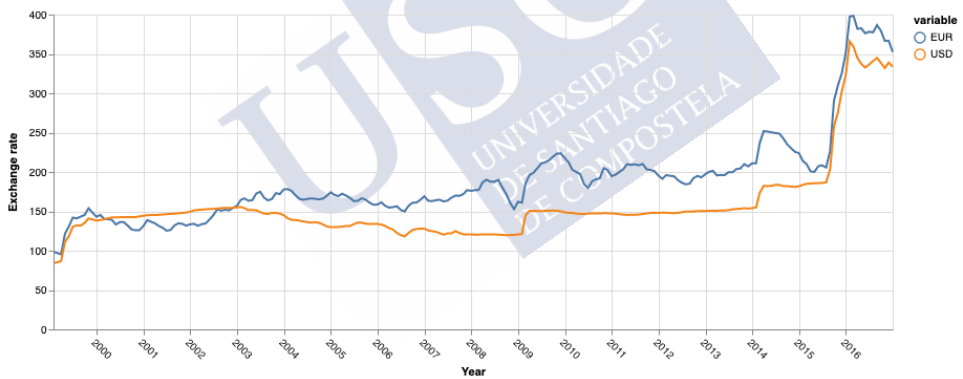
Data source: World Bank. World Development Indicators

Chart 5. Inflation in Kazakhstan.

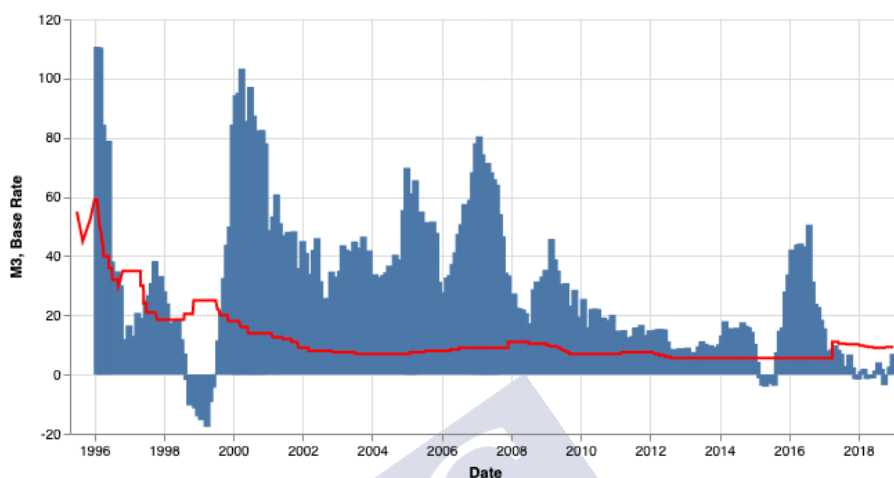


Data source: International Monetary Fund. *International Financial Statistics*

Chart 6. Tenge exchange rates.



Data source: National Bank of the Republic of Kazakhstan

Chart 7. Evolution of monetary aggregates and interest rates.

Data source: National Bank of the Republic of Kazakhstan

In Kazakhstan privatization was conducted according to the "National program of privatization". The program included a large-scale privatization and unique objects for individual projects. Massive privatization of medium-sized and small enterprises was carried out through auctions and competitions. The privatization was performed in four phases.

-In the first two phases, until 1995, the main goal was to create the conditions necessary for the transition from a centrally planned to a market economy, and privatization was carried out both with free and paid transferences of ownership. Ownership of state enterprises for which they work passed on favourable terms to labour collectives working on them through corporatization.

-The third phase took place from 1996 to 1998. Its main distinctive feature was that privatization was carried out only at a price. In accordance with the privatization and restructuring program of state-owned enterprises 1996-1998, it have been implemented in

the following sectors: energy, oil and gas, petrochemical, metallurgical and mining, transport and communication (land, air transport, telecommunications), agriculture and social services (health, education, culture, tourism and sport).

-The final fourth stage has been realized under "The program of privatization and efficiency of state property for the years 1999-2000", in which the transfer of ownership took place not only at the national, but also at the municipal level, which led to an increase in revenues of local budgets.

Diversification is a complex, capital-intensive and large-scale task, requiring huge investments, which calls for systemic structural policy measures. The component elements of structural policy are the development strategy of industry, agriculture, transport, etc. Together, these strategies have the goal of increasing the share of industry in GDP, increasing the share of final products in total output, increasing the share of small and medium-sized businesses in the amount of the final product, etc. All these strategies should be connected together in order to be capable of leading to economic restructuring which will result in improvement of living standards and employment. But structural change is a long-term task. Over the years, the country's income from oil and gas sector will fall, leading to a reduction of financial resources and pressing on the economy for transformation. The decrease in production in specific industries will subsequently release labour, thus possibly leading to migration processes, as part of the labour surplus can emigrate to neighbouring countries. Therefore, the coordination of the structural policies with neighbouring countries will be a pressing issue. Limited financial resources, force to look for the least capital-intensive and the most effective changes in the structure of the economy.

Two main avenues of manufacturing diversification can be distinguished (Beblawi, 2011): *oil-based* and *import substitution* industries. Oil-based industries (including refineries, petrochemicals, and energy-intensive industries such as aluminium, are usually large-scale and capital-intensive projects, generally state owned. For an oil exporting country they are a very natural way of expanding manufacturing production. In contrast, import substitution industries, including a diverse set of activities, like food processing and the manufacture of construction materials, are usually small, labour intensive and often privately owned, and thus less suited to base their development on the existing production structure of an oil-producing country. But diversification confined to the oil industry will not reduce dependence on oil and gas, even if it can be useful to reduce the risks associated with fluctuations in international oil prices, and to create and maintain jobs in the short term.

Thus, diversification through import substitution industries is usually the goal of economic reform in resource-based states, but it has to deal with the scarcity of key elements, like entrepreneurship and private risk taking, in these economies. Private sector involvement is important for diversification as a way to create jobs for the population of the country in the required scale, but also as a way to attract foreign direct investment (FDI), that can provide the type of capital and knowledge required to spread economic activity to previously non-existent industries.

In 2003, the Strategy for Industrial and Innovation Development of Kazakhstan was approved. The main objective of this strategy was to achieve sustainable development of the country through economic diversification, at the expense of shifting from extraction and preparing of conditions for transition to the long perspective to service

and technological economy. That was the first attempt at a major restructuring of the economy and industry of Kazakhstan. The strategy envisaged the creation of institutions such as Kazakhstan Investment Fund, Kazakhstan Development Bank, Innovation Fund and Export Insurance Corporation to promote the development of innovative capacity through direct funding jointly with private investors and perspective high-tech projects and participation in the establishment of the basic elements of the innovation infrastructure.

This strategy brought generally positive changes in the planned structure of the industry, initially increasing the share of manufacturing industries. However, after five years, it became clear that the industry structure did not change in the desired direction. On the contrary, the industrial specialization on raw materials was strengthened. The share of manufacturing industries decreased to 11.8% at the end of 2008, while the share of mining industries increased to 18.7%, leaving virtually unchanged the structure of exports at a 75% of raw materials, of which 2/3 are oil and gas condensate. The Strategy 2005 set a task to the creation of regional "locomotives" of economic development through the formation of regional corporations. An attempt was made to strengthen the Strategy by adopting the program "30 corporate leaders", focused on the implementation of major investment projects initiated mainly by private companies. But of the projects proposed, more than 70% came from mining companies and were aimed primarily at the expansion and modernization of production. Very few of these projects were finally implemented, anyway.²⁷

²⁷ Kazhiken (2011).

The main purpose of anti-crisis program in 2008 was the mitigation of the negative effects of the global crisis on the socio-economic situation in Kazakhstan. USD 10 billion were allocated from the NFRK in 2009-2011, about 20 percent of the country's GDP. The main activities financed from the NFRK were:

1. The stabilization of the financial sector.
2. The support of the housing and mortgage markets.
3. The support for small and medium-sized businesses.
4. The development of the agricultural sector
5. The implementation of innovative, industrial and infrastructure projects.

By reducing the NBRK reserve requirements, second-tier banks increased their resource base at 350 billion KZT. At the same time, a Stress Assets Fund was created in the amount of 122 billion tenge. Unfortunately, the pace of innovation development and implementation of promising projects in the manufacturing industry remained relatively low, and there were no big structural changes in the economy of Kazakhstan. The oil and gas industry, whose share in total GDP increased, plays a vital role in Kazakhstan's GDP structure. The driving force of the economy remained the mining industry, which provided a significant share of export earnings.

In 2012, the contribution of the mining industry of Kazakhstan's GDP was about 17%, where the share of oil and gas account for almost 90% of this volume. In the structure of foreign trade of the country, dominated by commodities, 60% of its exports are oil and oil products. Today is an extremely high correlation between economic growth and indicators of the mining industry between the level of

nominal GDP and the price of oil is over 90%. The slow pace of development of science delays the introduction of new technologies. The diversification of the economy did not become a real priority for governments at all levels, due to the lack of investment attractiveness of non-extractive industries, adequate state mechanism to ensure a favorable business climate and opportunities for participation of small and medium-sized businesses in the manufacturing sector.

During the global financial and economic crisis, there was a significant reduction in the volume of banking finance to the real sector of the economy of Kazakhstan, due to the increasing threat of default by the financial institutions. In 2010 a new programme was established, as a logical continuation of previous diversification policy, containing the main provisions of the Industrial-innovation Development Strategy for 2003–2015, the Program "30 corporate leaders of Kazakhstan" and other program documents in the sphere of industrialization. The new course of industrialization involved not just the extensive growth of the economy, but the bust innovative growth with further diversification and development of modern high-tech industry structure. The initiators of big projects promotion should be JSC National Welfare Fund "Samruk-Kazyna", strategic companies of fuel-energy and metallurgical sectors of economy and also strategic foreign investors.

Very few of the projects implemented under this programme were directly related to the production of finished products, and most investment funds were still directed to the oil and gas and mining sectors and infrastructure.²⁸ The trends attracting investment capital into the mining industry perpetuated the raw material orientation of

²⁸ President of the Republic of Kazakhstan N.A. Nazarbayev January 27, 2012 at an expanded meeting of the Government of the Republic of Kazakhstan.

the economy. As a consequence, it became unstable with respect to external influences. The analysis of the implementation of the above programs indicates that the task of increasing the share of non-oil exports in the total volume of Kazakhstan's exports to at least 40% was not accomplished. All these strategies did not lead to the qualitative industrial change announced in the priorities of diversification. E.g., agriculture remains unattractive for investment, and lack of financial resources is a deterrent to the introduction of modern technologies, leading the country to a high level of dependence on food imports. The growth rate of agricultural production, raw materials and food in recent years remain below the rate of increase in food imports, which is a threat to food security.

2.3 FINANCIAL SOURCES FOR DIVERSIFICATION

The total fixed investment of manufacturing from all sources of financing for the period 2010-2014 was 2 876.8 billion tenge, being 70% of this amount own funds (money and assets of the business owners: land, buildings, etc.) and 30% loans. At the same time, as we have seen, fixed investment in manufacturing amounted to just 2.4 billion tenge. The volume of foreign investments and loans exceeded \$5 billion, which is more than the volume of foreign investments in the manufacturing of Kazakhstan in all previous years, apparently because of tax breaks.

Being the most successful reformer in the Commonwealth of Independent States (CIS) and based on its strong macroeconomic performance and financial health, Kazakhstan became the first former Soviet republic to repay all of its debt to the International Monetary Fund (IMF) in 2000 (7 years ahead of schedule). This contributed to

receiving an investment-grade credit rating from major international credit rating agencies. But the global financial crisis that started at the end of 2007 had multiple implications on Kazakhstan's economy and exposed underlying vulnerabilities. With lower oil and commodity prices and adverse conditions in international capital markets, new challenges surfaced for emerging economies: decline in public revenues, liquidity shortages, problems for the stability of the national currency, and the dependence of financial institutions on external funding, all affected negatively investors' confidence and capital outflows. In these circumstances the Government quickly stepped in to regulate and stabilize the situation. A set of policies were introduced under the so-called Anti-Crisis Program (ACP) to help mitigate economic vulnerabilities and establish a basis for the resumption of growth. As a part of this policy Kazakhstan's monetary authorities devalued the currency and vastly expanded their role in the financial sector by entering into the capital of the four largest banks. In the end, Kazakhstan's financial system proved itself solid enough to avoid market collapse.

In order to realize the ACP, the government decided to allocate 1.196 billion tenge (about 10 billion US dollars or 35% of the Fund's assets at the time of the decision) from the NF to the special accounts of JSC "Samruk-Kazyna", JSC "Development Bank Kazakhstan" and JSC "KazAgro". The banking sector received almost half of the targeted transfers from the NF. Nevertheless, according to National Bank the volume of loans as % of GDP decreased from 44.9% in 2009 to 33.1% in 2013.²⁹

²⁹ <http://nationalbank.kz/?docid=342&switch=russian>

The ability to finance the steps towards industrialization, diversification of the economy and increased competitiveness of local enterprises in Kazakhstan's manufacturing sector depend very much on the situation of the oil market. The average cost of oil production in Kazakhstan is estimated around \$50 per barrel, so a minimum price of at least \$60 per barrel is required to be able to support the industrialization programme. Prolonged periods of ultra-low prices dramatically reduce the possibility of financing the process of economic diversification.

Kazakhstan's GDP growth reached a low point in 2015 but gradually recover thereafter. Based on an oil price assumption of \$53 per barrel, growth is expected to be slow, leading to deficits in both the current account and the consolidated fiscal balance. The outlook is highly sensitive to oil price assumptions. Our baseline scenario assumes that if oil prices start to recover to the \$60 range export earnings and domestic demand would gradually recover. Government's projections used a conservative assumption of a \$50 per barrel oil price for 2015-17, which translated into GDP growth of 1.5 percent in 2015, 2.2 percent in 2016, and 3.3 percent in 2017). This scenario assumed that oil production would remain almost flat until the end of 2017, when the off-shore Kashagan oil field was expected to come on line and boost production.

Total government debt was expected to go up but remain low; with ample reserves in the National Fund to cover it. External debt was expected to increase because the government borrowed US\$7–10 billion from IFIs as part of the Partnership Framework Arrangement, to support the Kazakhstan-2050 development strategy. Although domestic indebtedness increased from 11% of GDP in 2014 to over 13% in 2017 because of the budget deficit, Kazakhstan's net financial

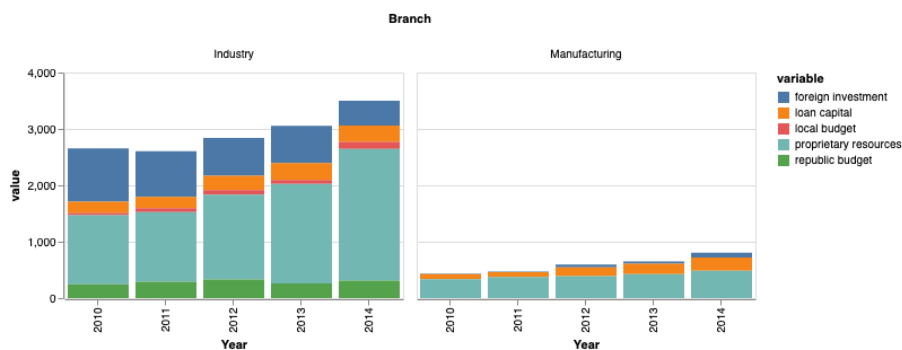
asset position will remain solid, as the NF's foreign exchange reserves will continue to vastly exceed total government debt. The ratio of total external debt to GDP and the debt service ratio are expected to stay steady and sustainable over the medium term.

2.4 DIVERSIFICATION THROUGH THE NATIONAL FUND

One of the most important decisions to modernize the country's economy is to increase the level of credit activity of Kazakhstani banks, because for many businesses and individuals loan servicing is expensive. According to the National Bank of Kazakhstan the industry structure of lending has been stable in the last two decades. In order to progress in the diversification and modernization of Kazakhstan's economy this lending should not be limited only to the support of big business and strategic enterprises. Instead, it should create conditions for development of small and medium-sized businesses, increasing its share in the total GDP and activating bank lending to small and medium industrial projects.

The Fund invests the revenues received from asset sales, together with other finance sources, to the creation of new strategic advantages for the country and further diversification and modernization of the economy. Since 2012, the State redirects annually \$8 billion³⁰ in the form of a transfer from the NF to the budget. Of this amount, all entities overseen under the state program of the industries, including the construction, were sent 3.7 trillion tenge. About 1.8 trillion tenge came to the industry in the form of fixed investment, and of this only 2.87 billion (0,2%) came in the form of fixed investment in manufacturing enterprises.

³⁰ Statement of receipts and application of the National Fund

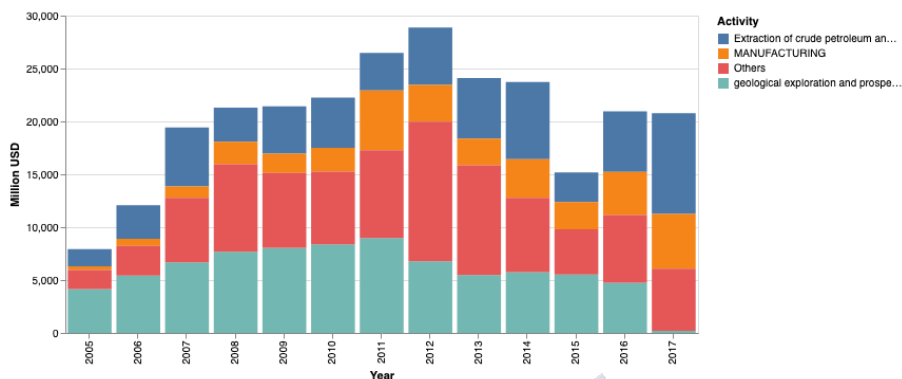
Chart 8. Financial sources of industrial activities.

Data source: National Bank of the Republic of Kazakhstan.

The share of manufacturing in the gross inflows of foreign direct investments (FDI) increased substantially during the period. The government attempted to build an integrated system of strategic planning led by the state program, but started as a result start to "engage in" almost all sectors, washing away the main focus. The scheme had to be rebuilt, assigning to each branch its own development program. The total weight of all sectors at the beginning of the program was about 60% of GDP, but in 2014 the share of manufacturing in GDP after the implementation of the first five-year state program decreased to 10.4% compared to 11.8% in 2008.³¹

³¹ Although most of this variation is due to the change in the sectoral classification of GDP in 2011, in order to adapt to the NACE international classification.

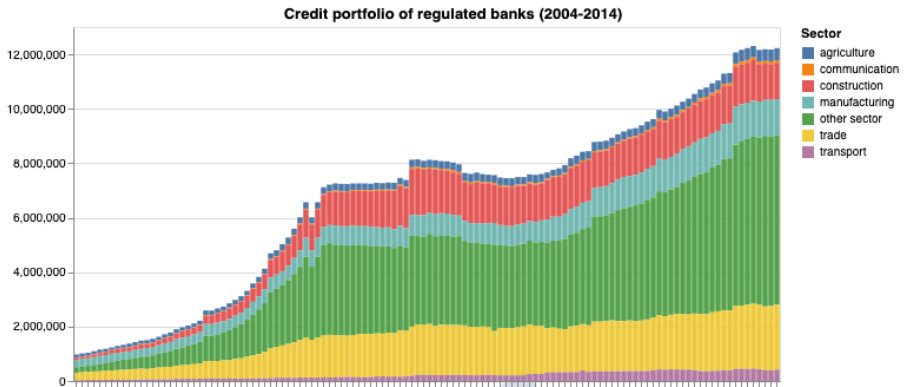
Chart 9. Foreign direct investment in selected activities.



Data source: National Bank of the Republic of Kazakhstan.

The share of manufacturing in the gross inflows of foreign direct investments (FDI) increased substantially during the period. The volume of foreign investments and loans exceeded USD 5 billion over these five years, more than the volume of foreign investments in the manufacturing of Kazakhstan in all previous years. In the pre-crisis period up to 2008, there was a gradual increase in the loan portfolio of the regulated banks. In the crisis period between 2008 and 2010, the credit was suspended and the loan portfolio fixed at the level of 449 billion tenge. In 2010 the government introduced measures for the financial support of manufacturing businesses, such as interest rate subsidies and loan guarantees. Apart from this, it increased the attraction of liquidity of banks on lending to priority sectors. However, the interest rates offered by banks are significantly above the expectations of enterprises in the real economy.

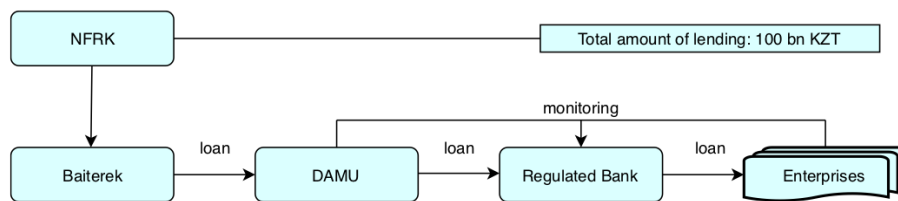
Chart 10. Credit allocation to selected activities.



Data source: National Bank of the Republic of Kazakhstan.

The devaluation of the national currency, the *tenge*, had a negative impact on the financing of the manufacturing, because about 37% of the loans of non-bank entities are in foreign currency. As a result, the burden on manufacturing enterprises to service loans increased. Thus, the need to improve access to credit for projects manufacturing industry requires new additional measures to ensure the financing of projects of small and medium-sized businesses in manufacturing.

The NFRK transfers go through a special account opened at the NBRK for Baiterek, Damu and regulated banks. The Government created measures to finance lending for manufacturing SME projects via the regulated banks. The NFRK financed projects of SMEs in the manufacturing sector in the amount of 100 bln.tenge. The use of the resources the NFRK is performed by placing funds resulting from the JSC "Entrepreneurship Development Fund Damu" in regulated banks to finance SMEs in the manufacturing sector.

Figure 8. Financing of private enterprises by the National Fund.

Source: Own elaboration.

For these purposes, JSC "National Holding Baiterek" (Baiterek) borrows from the National Fund by issuing bonds worth 100 billion tenge up to 20 years from the commencement date of the bonds at the interest rate of 0.1% per annum. Then Baiterek provide Damu loan on same amount to 20 years at the interest rate of 0.15% per annum, with repayment terms at the end of the period, according to the terms of the loan agreement. The overall effect is expected due to placement according to the following structure:

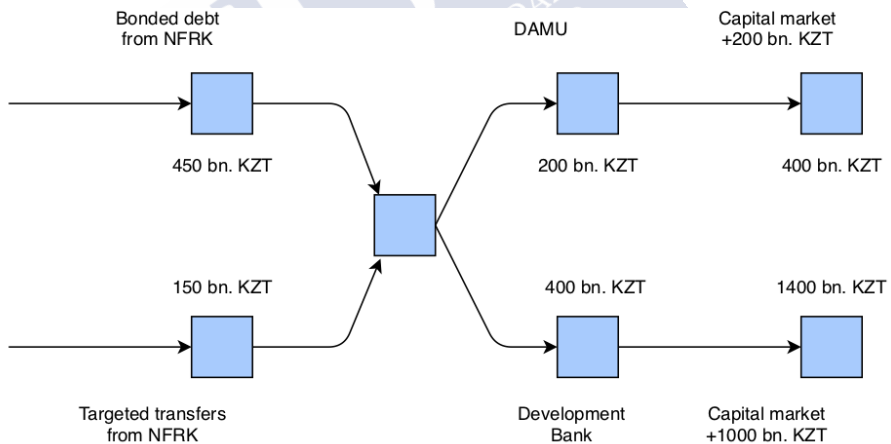
1. Lending to microcredit organizations from regulated banks in the amount of 600bn. KZT (return 7%, period until 7 years).
2. Direct lending from the Development Bank of Kazakhstan in the amount of 750bn. KZT (return from 5.0-6.5%, period from 5 to 15 years).
3. Interbank lending program: 550bn.kzt (return until 8.5%, period up to 10 years).
4. Financing of export transactions and leasing in the amount of 100bn. KZT (return from 5.0-8.0%, period to 10 years).

In 2014, the external factors affecting the development of Kazakhstan's economy deteriorated. There had been a general slowdown in world economic growth and rising geopolitical

instability in connection with the events around Ukraine. The introduction of mutual sanctions between Russia and the EU and Russia and the US led to a drop in Russian growth and a general destabilization of the macroeconomic situation in the area.³²

The main aims of the Government and the National Bank's policy are directed to preserve macroeconomic and financial stability and economic growth and competitiveness of Kazakhstan's economy. Hence, the main objectives of the policy are leveling the effects of external factors to ensure social and economic stability in the country. Thus, in order to maintain economic growth and employment in the years 2014 - 2015 at the initiative of the Head of State 1tn.kzt from the NF were transferred to the Republican budget.

Figure 9. Fund channelling from the National Fund to capital markets.



Source: Own elaboration.

³² Statement of the Government of the Republic of Kazakhstan and the National Bank the Republic of Kazakhstan on main directions of economic policies for 2015. <http://www.primeminister.kz/24-12-2014>

2.5 THE IMPACT OF THE NATIONAL FUND ON DIVERSIFICATION

Over time, the structure of the Kazakh economy has gradually shifted away from agriculture and manufacturing towards services, with the mining industry growing in importance recently. To evaluate the materiality of the structural differences in relative terms we will compute structural change indexes following the approach of Moore (1978). This approach is based on the premise that the GDP structure can be described as a vector whose coordinates are the GDP shares of the various industries. The angle between two vectors measured at different points in time is then a measure of structural change:

$$k = \frac{\sqrt{\sum_{i=1}^n (v_{1i} - v_{0i})^2}}{\sqrt{\sum_{i=1}^n (v_{1i}^2 + v_{0i}^2)}}$$

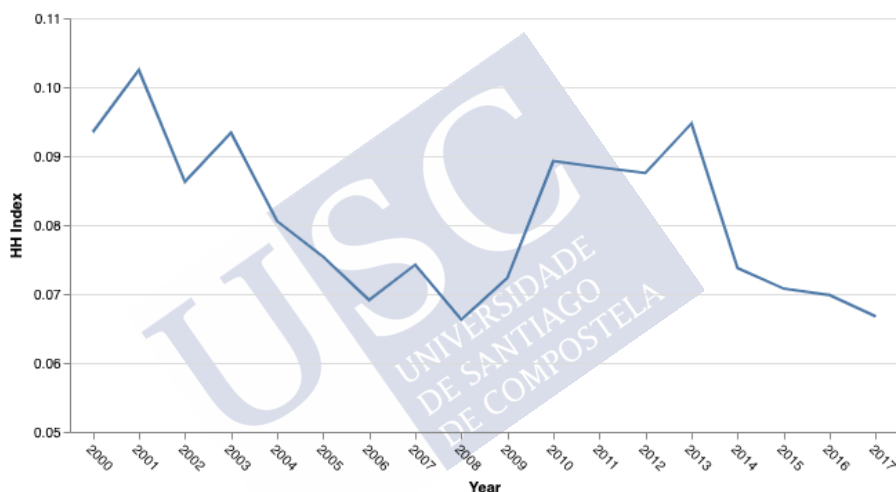
where V_{0i} and V_{1i} are the shares of industry i in total GDP for different periods. The value of the index is located between 0 and 1: the closer to zero, the greater the structural changes between two periods; the closer to one, the lesser the changes.

Policies fostering diversification of exports facilitate the "self-discovery" of comparative advantages. Countries tend to diversify their production bundles as they develop, and only at relatively high levels of income per capita do they start to specialize again. Reliance on a few export products tends to reduce growth by hampering productivity and increases a country's vulnerability to sharp declines in terms of trade. By diversifying the export bundle along the product

and destination dimensions, countries with export-oriented growth strategies hedge against product- or market-specific external shocks.³³

Export diversification is measured usually through the Herfindahl Index. This index measures the concentration of export shares held by a particular product (destination) in a given export profile, and varies from zero (no concentration) to one (full concentration).

Chart 11. Herfindahl index of concentration of Kazakhstan's exports.

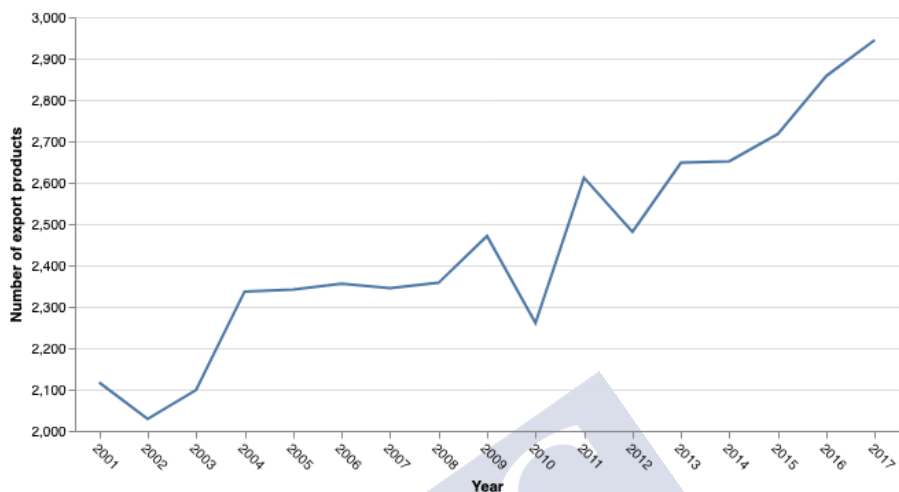


Data source: World Bank. *World Integrated Trade Solution*.

Another way to measure the concentration (diversification) of exports is through the count of export products, e.g. by counting the number of different HS-6 categories that contain exports of at least \$100,000. In this case, a higher number represents a higher degree of diversification.

³³ See Imbs & Wacziarg (2003), Hesse (2009), Varela (2013).

Chart 12. Number of HS-6 products with exports of at least \$100,000.



Data source: World Bank. *World Integrated Trade Solution*.

In both cases, it can be observed that there was no definite change in the measure of concentration/diversification during the period 2010-2014, just a slight increase in exports concentration, according to the Herfindahl index and a moderate increase in the number of products exported, that would point on the contrary to an increase in diversification. In both cases, decreases in concentration/increases in diversification were much more clear in the subsequent period, coinciding with a sharp decrease in oil prices.

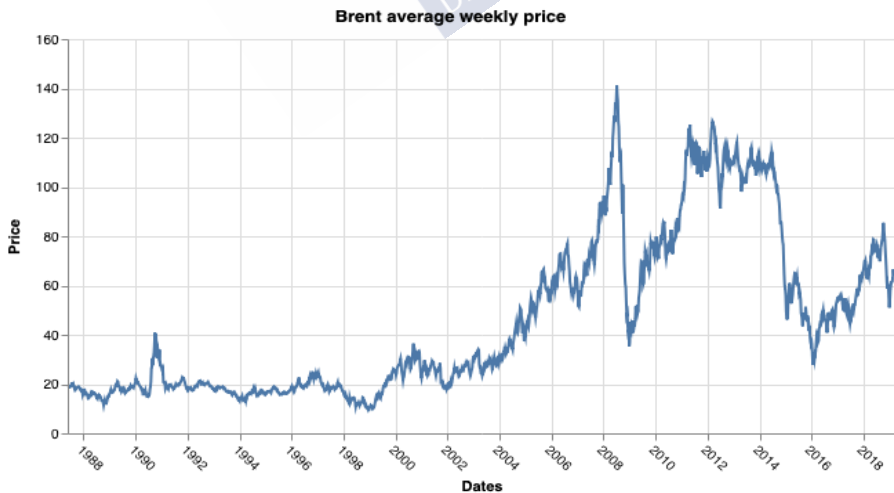
This negative oil shock, in a country where more than half the exports are oil-related, is strong enough to deflate oil production and export flows in such a magnitude to trump any other factor influencing the computation of concentration/diversification measures. While this may colour favourably the apparent effects of industrial strategies, it poses a serious problem for their sustainability, as the

cost of oil extraction acts as a threshold for the ability to accumulate windfall revenues.

Let us try to understand and estimate the possible impacts and model the receipt of the Fund. To do this, we will try to make a simple prognosis scenario for receipt and assets of the National Fund with oil price equal to USD 50 per barrel. We will consider the changes in oil prices on the basis of two factors: oil consumption and oil production.

The general trend is of a definite increase in demand for oil, taking into account the impact of periodic global economic slowdowns. Consider the commodity composition of oil consumption in order to understand the processes occurring in the oil market. About 70% of consumed oil is accounted for by fuel for transport (light distillates- gasoline, middle distillates-kerosene and fuel oil-diesel), while the remaining 30% of consumption comes from the petrochemical industry.

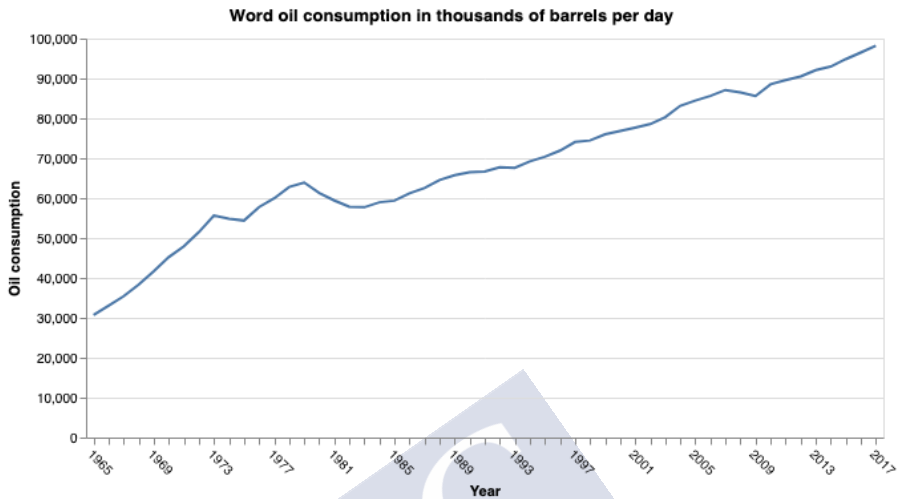
Chart 13. Evolution of oil price.



Data source: QUANDL.

Consider the automobile industry, as the main consumer of fuel. Due to new technologies cars are becoming more economical and environmentally friendly, and perhaps in the future, electric cars put traditional cars out of the market. But it is hardly possible to consider this option in the medium term. Assume change be progressive, as it is necessary to create the necessary infrastructure (gas stations, service stations, etc.), with the aim of reducing the consumption of motor fuel in the future. However, according to IMF forecasts, the increase in per capita income only in China and India will be enough to continue increasing the number of cars. Suppose that the increase in the number of cars block the decrease in demand for motor fuel in the developed countries due to the use of new technologies in the automotive industry. All other things being equal, this factor only will increase fuel consumption. Consider the petrochemical industry ,that accounts for 30% of consumption. The increase in world population and the replacement of traditional materials from the sphere of direct consumption (construction materials everyday chemistry, etc.) also results in an increase in petrochemical products by 60%. According to the analysis of time series of oil consumption there is a linear increasing trend in oil consumption, that we can safely assume that it will continue in the medium term.

Chart 14. World oil consumption.

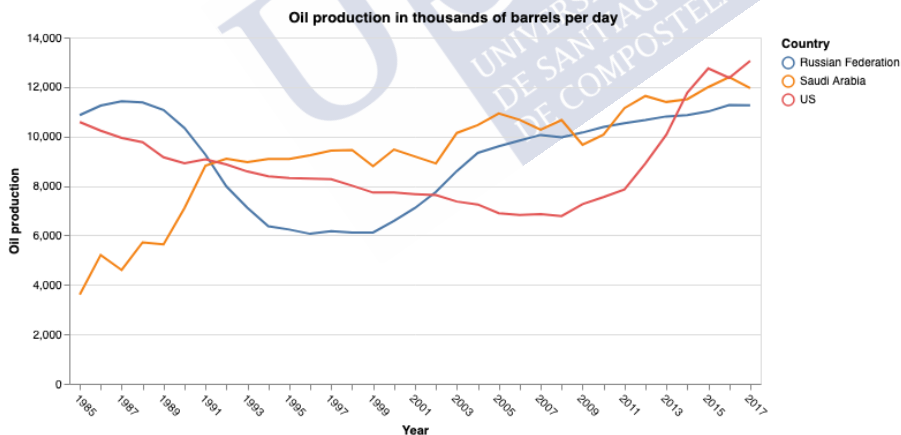


Data source: BP Statistical Review of World Energy.

Consider the behavior of the main oil producing countries which are Saudi Arabia, Russia and the United States, which together provide about a third of world production. Production grew in all of them during the period 2008-2016, especially in the US. The average cost of traditional production in the major producing countries varies: in Saudi Arabia is \$25, in Russia \$45, in the US \$50, as well as in Kazakhstan, and in Venezuela is \$77.6. When the price of oil falls within the range of the average cost of oil extraction in the Caspian Sea, estimated at around \$50 per barrel, the assets of the NFRK cannot grow, making impossible to satisfy simultaneously its savings, stabilization and development objectives, as any funds spent in financing industrial projects will detract from the savings for future generations and/or the transfer to national and local budgets.

According to Bloomberg EIA, increases in oil production in the US lead to reductions in market prices and increases in losses of oil companies operating in the oil shale sector and the growth of lost profits on traditional deposits. The usual assumption is that Saudi Arabia producers expect to increase market share at the expense of reserves and low production costs, but they are unlikely to continue to increase production in the case of production decline in the US. However, maintaining growth in supply by US oil is only possible in the short term, because of the financial instability of shale oil companies. The main aim of Saudi oil policy seems to be the holding of oil prices near \$60 a barrel. A projected level of hold price of \$60-\$65 per barrel would prevent significant negative impacts to the economies of these three main producers.

Chart 15. Oil production.

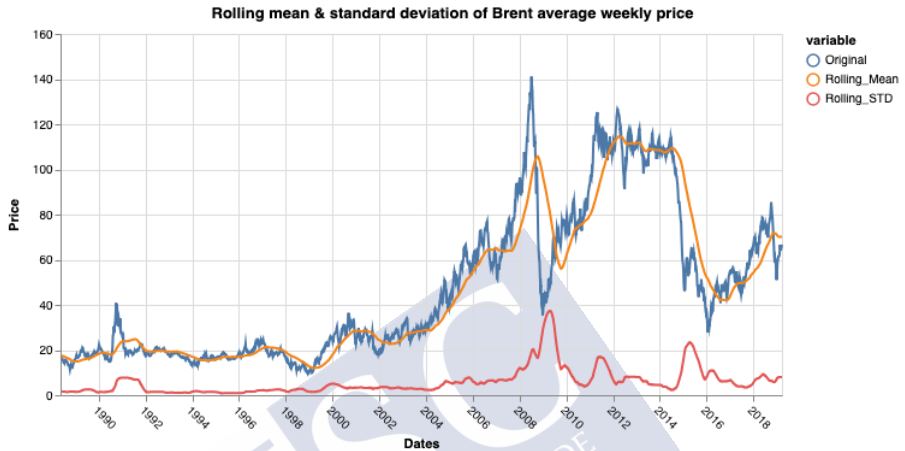


Data source: BP Statistical Review of World Energy.

Is this assumption justified by the data? The Brent oil price series seems clearly non-stationary, and in fact, the Augmented Dicket-

Fuller (ADF) tests has a value of -1.91 that does not allow to reject the null hypothesis of non-stationarity.

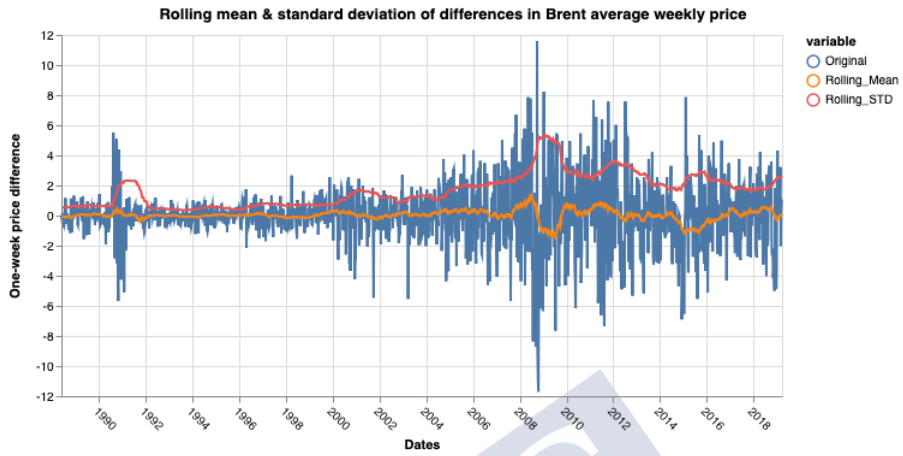
Chart 16. Rolling mean and standard deviation of oil price series.



Data source: QUANDL.

One simple way to make a time series stationary is to difference it. One-week differences in the average weekly price of the barrel of Brent oil show, in fact, a stable mean and a standard deviation slightly increasing with time. The ADF test of the differentiated series shows a value of -11.10, which allow to reject comfortably the null hypothesis of non-stationarity.

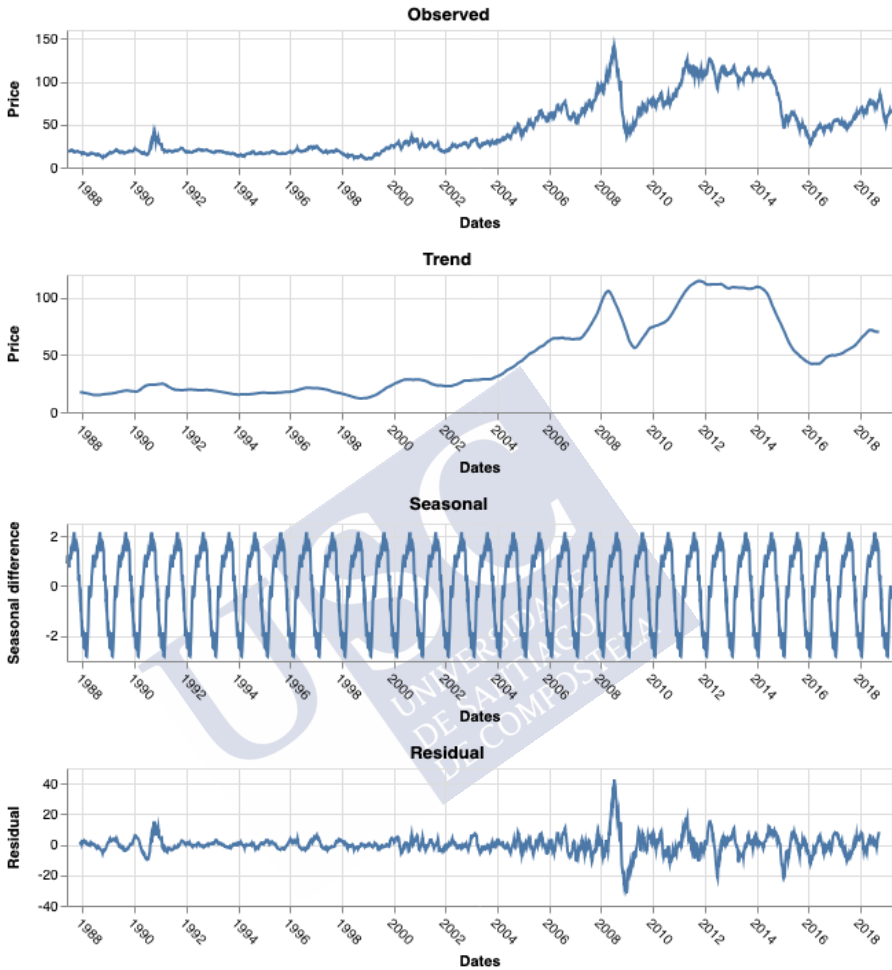
Chart 17. Rolling mean and standard deviation of differentiated oil price series.



Data source: QUANDL.

A standard decomposition of the original oil price time series provides also stationary residuals, and shows the inexistence of identifiable seasonal patterns:

Chart 18. Decomposition of the weekly oil price series.

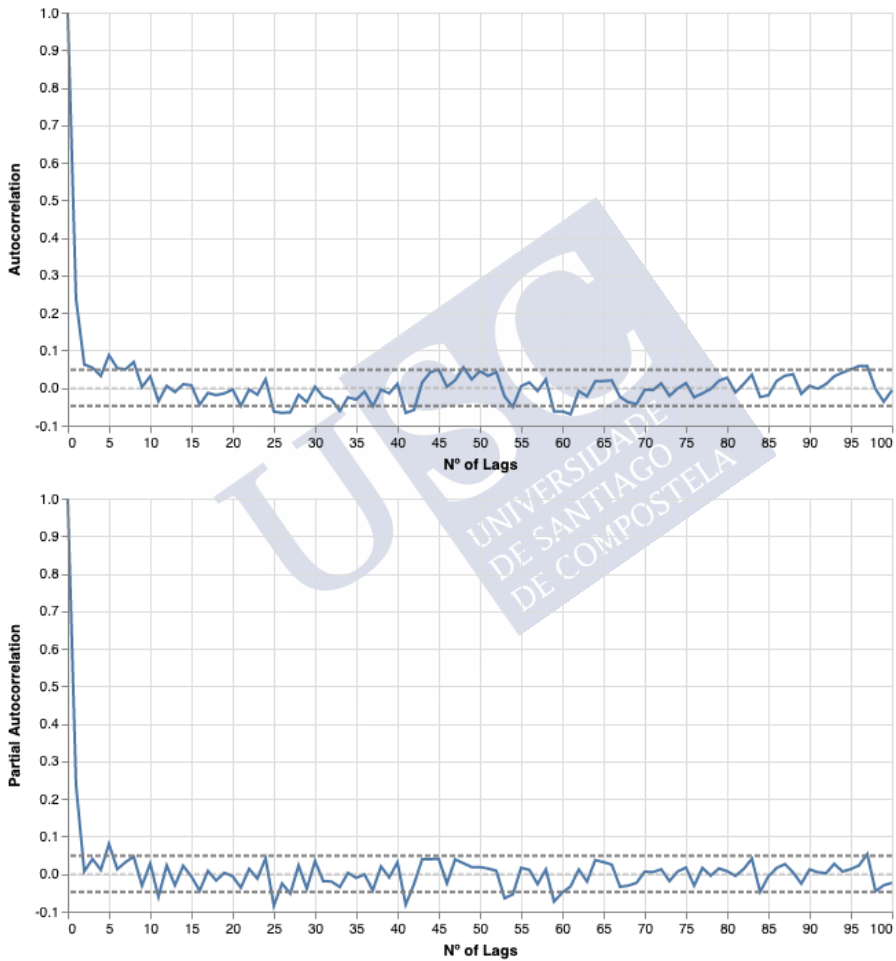


Data source: QUANDL.

Time series like this one, with one unit root, can be modelled as an autoregressive integrated moving average (ARIMA) process. The required number of terms (lags) for the autoregressive and moving

average parts of the process can be ascertained with the help of autocorrelation and partial autocorrelation charts, respectively.

Chart 19. Autocorrelation and partial autocorrelation charts for the weekly oil price series.



Data source: QUANDL.

Using the heuristic procedure of observing the number of lags where the autocorrelation and partial autocorrelation lines cross the 95% confidence upper bound, the pair (2,3) can be selected as the terms for the autoregressive and moving average parts of the process, making it an ARIMA (2,1,3) that can be estimated following standard Box-Jenkins methods.³⁴ With the help of the estimated process, and using the last year of the sample (April 2017-April 2018) as testing set and the rest of it as training set, it is possible to obtain short- and medium-term forecasts of the evolution of the weekly average Brent oil price. These forecast turn out to locate around a central value of \$70.³⁵

Chart 20. Short-term forecast of the weekly oil price based on an ARIMA(2,1,3) process.



Data source: QUANDL.

The high volatility of oil prices indicates that within a reasonable confidence band, the price of oil in the short- and medium-term can be

³⁴ See Enders (2008).

³⁵ See Kilian (2009), Ahmed & Shabri (2014), Baumeister & Kilian (2014).

anywhere in the \$40-\$100 range. The lower part of this band corresponds to the price region where the NFRK would be unable to further accumulate assets, as in fact happened during 2015, 2016 and 2017 after the negative oil price shock.

2.6 CONCLUSIONS

Kazakhstan's economy needs restructuring and diversification to cope with potential depletion of its natural resources. Diversification requires large investments and systemic structural policies. A SWF can be one alternative to finance these investments from windfall revenues coming from natural resources.

Although industrial diversification is stated as one of the main objectives of all national industrial development plans or strategies, most projects started under them focused on the extractive industries. The global financial crisis started in 2007 helped to detour a significant part of the funds originally assigned to the creation of new industries towards supporting employment and bailing out the banking system. As a result, I could not detect any significant positive effect of NFRK funding on any of the possible measures of the diversification targets during the 2010-2014 period: there were no increases in manufacturing activity rates nor decreases in concentration measures of exports related with the size of NFRK investments.

The variable that seems to show a strong correlation with the evolution of the above mentioned indicators is the price of oil. Its wild swings during the period considered inflated and deflated the values of production and exports of oil-related products, and thus were reflected in their respective shares as well as in the computation of concentration measures. This poses a conundrum to policy-makers in

Kazakhstan, because apparent improvements in the achievement of diversification targets takes place in those periods when the oil price is low. But low oil prices put into question the very possibility of being able to accumulate further assets in the NFRK. With an average cost of oil extraction in Kazakhstan of \$50, we have found that the extrapolation of current trends, implying an average price of \$70 for the barrel of Brent oil and high volatility, pose an important downside risk to the ability of the Fund to dispose of significant volumes of assets to support industrial policy.





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CHAPTER 3

THE RELOCATION OF KAZAKHSTAN'S CAPITAL AND CHANGES IN THE URBAN SYSTEM

3.1 INTRODUCTION

The phenomenon of capital relocation results from the confluence of multiple factors. Greatest interest was shown in the XX century by the transfer of the capitals of Turkey, Australia, India, Pakistan, Brazil, Germany, Malaysia and Kazakhstan. Such projects have been carried out also in African countries, including Nigeria, Tanzania, Malawi, Botswana and Libya. Besides, new capital cities were built in Afghanistan and the United Arab Emirates, and interesting experiments and projects in this area were carried out in Burma, Sri Lanka and Chile.

Discussions about the possibility and desirability of the transfer of the capital are currently carried out at the highest parliamentary level in more than 30 countries around the world, with Japan, Indonesia, South Korea, Iran, Thailand, China, Taiwan, Mongolia, Nepal, Bangladesh, Argentina, Venezuela, Bolivia and Egypt among them. The idea of relocating the capital city is also discussed today in some African countries, like Uganda, Equatorial Guinea, Liberia, Somalia,

Kenya and others, and several post-Soviet states, like Ukraine, Tajikistan, Kyrgyzstan, Azerbaijan, Georgia and Armenia.

In some countries where the capital was moved relatively recently, the question was posed again like e.g. in Australia, where the University of Western Australia initiated a public debate about the possible advantages of moving the capital from Canberra to Perth, on the basis of pushing the main development trends of the country and the centre of economic life gradually from the Pacific to the Indian Ocean, where a good part of the natural resources that are at the core of Australian prosperity lie.

Despite the relative popularity of these ideas and the relative frequency of capital city movements, the nature and rationality of this kind of political projects are not adequately and systematically studied. Many economists and political analysts are sceptic about capital transfer projects, arguing that the transfer of the capital city contributed only in rare cases to the resolution of tasks as balancing regional development, resolving the contradictions between the various ethnic groups, or creating new growth centres in the country. Rossman (2018) described this kind of precedents as extremely expensive mistakes or excesses of authoritarian and ambitious rulers, linking them to the achievement of short-term political objectives and the establishment of political domination, e.g. through the creation of alternative bases of loyalty in the regions with strong political support of the existing regime, or by neutralizing opposition, which is often concentrated in the largest cities of the country. Countries that have taken or are taking this kind of projects in different regions of the world have different political regimes, which strengthens the conclusion about the futility of the search of some common patterns.

Murphey (1957) considered in his analysis not only the recent experiences about relocations, but also the history of world civilizations in terms of capital city location. He looked for general laws of geographical location of capital cities in multinational countries, at different stages of development and maturity of urban networks, and in states with different political regimes and stages of economic development.

Potts (1985) has shown the claim that capitals are moved to generate economic growth and improve administrative efficiency to be plausible, even if such capital moves are rarely successful. Studying the case of Malawi, she argued that despite the rhetorical importance of Lilongwe's role as a growth centre, regional planning arguments have been used more to justify the relocation than to guide its development.

Schatz (2003) approached capital city relocation from the point of view of motivation systems and the challenges to which they are trying to answer in the context of national development. He analysed the project of transferring the capital of Kazakhstan in a comparative manner, identifying some general regularities in the formation of nations in different geographical and political conditions. At the same time, this discussion is carried out in terms of understanding the needs of national construction and development dynamics of the nation-state and national identity

Corey (2011) proposed a balanced approach to capital city relocation, based on a comparative analysis perspective that reveals some general regularity in the formation of nations and the development trajectories of nation-states, as well as some general world trends. Studies of this kind try to extract specific lessons from

international experience in capital city relocations, avoiding unilateral ratings and verdicts. The approach emphasizes issues related to the need of careful planning in such projects.

All these authors addressed the examples of specific countries or different regions of the world, but could not extract common global laws. Researchers often discuss the topic from the perspective of their particular discipline, using one of the methodological approaches available, and often neglecting other aspects of the problem. Some of the approaches followed in the literature were based on the spatial perspectives of economics, geopolitics, system-dynamics approach, the theory of growth poles, the concept of "smart cities", relational theory and other theoretical paradigms. Such a variety of methodological and disciplinary positions in the absence of a unified theory creates some difficulty for the understanding and analysis of capital relocation as an individual, specific phenomenon.

Daum and Mauch (2009) expressed the wish to create a unified science of capitals, where the different methodologies and disciplines could be integrated, and that could become the basis for a meaningful analysis of the opportunities and risks of such projects. In their view, the analysis of capital cities relocation in history can contribute to a better understanding of the concept of capital city.

Combining the concentration of political powers and the economic centre of the country in just one city can create conflict, and often leads to the centralization of the country. In practice relocation of the capital city was associated in many cases with the abandonment of the concept of a single capital, dominant in all spheres of public life, and with the creation of a special administrative or political capital, different and beyond the dominant economic cities, trying to

balance the political centre and the economic centre of the country. Examples of these kind of couples are Washington and New York in the USA, Ottawa and Toronto in Canada, Sydney and Canberra in Australia, Wellington and Auckland in New Zealand, Johannesburg and Pretoria in South Africa, Moscow and St. Petersburg in Russia, and the same thing was attempted in Kazakhstan with Almaty and Astana.

An important element of this view is the idea of checks and balances, the attempt to separate and balance economic and political power, that in some cases give birth to a special concept of administrative city. The motive for this type of relocations is the need to enter into a compromise between different parts of the country: anglophone and francophone states in Canada, the North and South islands in New Zealand, Anglo-Saxons and Boers in South Africa, northern and southern states in the US. Similar, but more complex motives connected with historical developments, took part in the development of the decentralized systems of countries such as Switzerland, Germany and to some extent Italy.

Authors like Overman & Venables (2000), Henderson (2005) or Zimmerman (2010) investigate about the optimal size of dominant cities, considering the conditions under which cities can create advantages or serve as a brake on the development of national economies. Their findings point out that current trends in the growth of dominant cities in dozens of developing countries rarely benefit their national economies, and instead create new social tension and division.

The creation of a new capital in Kazakhstan has led to the construction of a new national identity encompassing the

representation of identities belonging to religious, ethnic and linguistic groups. Schatz (2003b) emphasizes the problems of capital city relocation in the context of the incomplete nation building process taking place in Kazakhstan. According to this author, if an existing capital is poorly located from the standpoint of economic and administrative rationality, this only tells us that the capital city should be moved, but it says nothing about where it should be moved to. Schatz argues that official reasons give an incomplete picture of the decision calculus and that Kazakhstan faced structural conditions close to postcolonial African contexts that made the relocation of its capital city to appear attractive.

Kopbayeva (2013) argues that capital city relocations in African and Latin American states were driven by rational reasons. These states used capital cities as centrepieces of their nation-building projects. She then endeavours to show how capital city relocation, nation-building, and national identity intersect in the case of Kazakhstan, suggesting that the relocation of Kazakhstan's capital was a symbolic action designed to foster Kazakh identity as the centrepiece of Kazakhstan's nationalistic project.

3.2 THE TERRITORIAL STRUCTURE OF THE REPUBLIC OF KAZAKHSTAN

In this section, I will examine the changes in the territorial structure of the RK. These changes concern the urbanization that has occurred since 1991, involving migration from rural areas to traditional cities and industrialization of the rural sector with growth of many districts into urban centres and expansion of existing cities, and the changing spatial inequalities across regions, resulting from allocation of state

investment and budgetary resources, distribution of foreign direct investment, and other factors, in order to understand the changes in the spatial configurations of the Kazakh economy, how they are shaped by the institutional landscape and policies, and how they have impinged on economic development.

By administrative division Kazakhstan has 14 regions and two cities of republican submission, Astana and Almaty.³⁶ Geographically located from west to east of the country the Atyrau, Mangistau, West-Kazakhstan, Aktobe and Kyzylorda regions can be determined as oil-gas regions. Their distinctive features are the following are high level of investments, an economy mono-oriented to oil extraction, and underdeveloped processing and agricultural sectors. In accordance with the official data they accounted for 19.6% of the population of the country in January 1, 2018. Kostanai, Zhambyl and South-Kazakhstan regions in the south of the country could be called as agrarian-industrial regions. These three regions mostly specialized in agriculture and have the resources for development of industrial potential with 27.1% of the population of the Republic. The other agricultural regions are divided into two huge tracts of land, namely Almaty region in the south, and Nord-Kazakhstan and Akmola regions in the north of the country. These are regions with a weak industrial base and 18.3% of population. The industrial areas represent a wide wedge from east to the centre of the country. They are Pavlodar, East-Kazakhstan and Karaganda regions. Huge amounts of metals, and differentiated manufactures are the typical features of these regions, that have 19.4% of the population. The cities of republican submission, i.e., Astana and Almaty are the consumer centres with the

³⁶ Also, there is Baikonur, the city with space-vehicle launching site with the specific status, something like rent territory of Russian Federation.

highest level of income and highly developed sector of services, where 15.6% of the population lives. 1.8 million people lives in Almaty city compared with around 2 millions in the surrounding Almaty region. The administrative-territorial structure of the Republic of Kazakhstan the entire country is completed by 160 districts, 2,474 rural administrations, and 6905 rural settlements.

Economic and geographical regional inequality is a settled fact in Kazakhstan. The government realizes the significance of the situation and is focused in the rational territorial redistribution of industry, trying to reduce the asymmetries in regional development, but without much success.

Experience in the use of zonal structures in the Republic of Kazakhstan originates from the first decade of independence, when nine SEZ were created for the purpose of social and economic development of territories and acceleration of restructuring of the national economy from directive system to the market one. According to the Decree³⁷ of the President of the Republic of Kazakhstan “About special economic zones”, the purposes of the creation of such zonal structures were: attraction of investments for the accelerated development of regions; creation of production capacities, producing competitive products for the world market; and development of modern market-based management and entrepreneurship. Most SEZs are in manufacturing production zones.

³⁷ Law of the Republic of Kazakhstan 2011. “About special economic zones in the Republic of Kazakhstan” of July 21, Volume 469-IV. (in Russian).

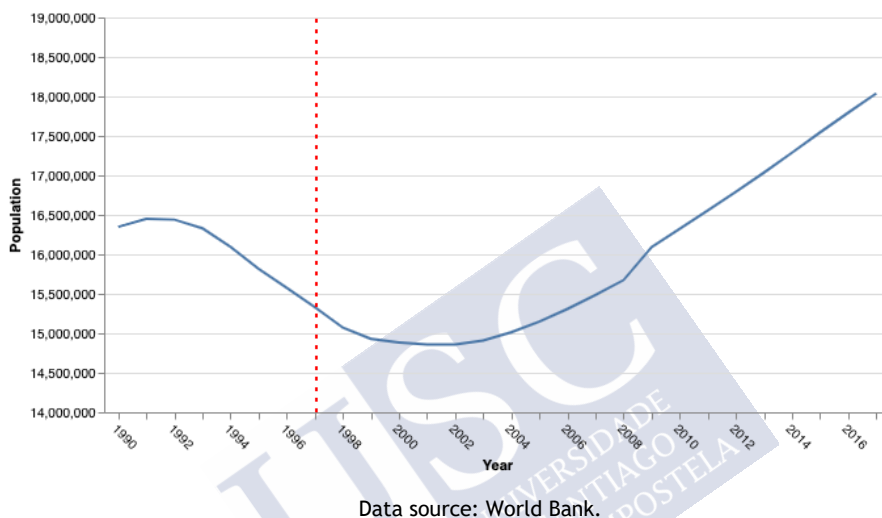
3.3 MIGRATION FLOWS

Since gaining Independence in 1991 the ethnic portrait of the country gradually changed for the benefit of natives. Kazakhstan is a multi-ethnic state, hosting 125 ethnicities and nationalities. The most numerous (exceeding 1% of the total population) ethnic groups are: Kazakhs, Russians, Uzbeks, Ukrainians, Uyghurs, Tatars and Germans, which account for 95,6% of the total population. With independence in 1991, citizens of European nationalities emigrated *en masse*. Most Russians, Ukrainians, Belarusians and Germans left primarily for Russia and Germany. By 1999, more than 10% percent of Kazakhstan's 1989 population had picked up and left. But from other part as Europeans were emigrating, the Kazakhstani government was encouraging ethnic Kazakhs from surrounding countries to return, granting them the status of *oralman* ("returnee" in the Kazakh language).³⁸ The influx of *oralman*, combined with the natural increase of the population, enabled Kazakhstan's population to rebound to its 1989 level by 2011. The Asian population residing mainly in western *oblasts* and in the agrarian south tends to have higher birth rates compared to non-Kazakh population of western, central, eastern and northern regions. The ethnic composition of the population of the Republic changed drastically. In 1990, around 40% of the population were Kazakhs, other 40% were Russians, and there was a 20% of

³⁸ In December 1997, it was adopted the Law "On migration", according to which introduces the concept of "repatriates", i.e. ethnic Kazakhs repatriated, permanently resident at the time of acquisition of the sovereignty of Kazakhstan abroad and arrived in Kazakhstan with a view to a permanent residence. In 1993 was established first annual quota, according to which the visit or repatriation of 10,000 families (approximately 40,000 people) have been carried out. With the improvement of economic conditions in Kazakhstan since 2002, the quota size has increased significantly, reaching in 2005 -15 thousand. Families, nowadays it increased to 20 thousand families a year. In the early 90's the quota distributed, mainly in the Northern Kazakhstan. This was done in order to cover the huge emigration flows, leading to a significant loss of population in the northern and central regions.

population of other nationalities. Instead, in 2016 fully two thirds of the population were Kazakhs, little more than 20% were Russians, and the rest of nationalities accounted just for 13% of the population.

Chart 21. Total population of the Republic of Kazakhstan.³⁹



Moving the capital city was one of the steps to regulate the irregular distribution of ethnicities throughout the country, where southern *oblasts* were mainly represented by Asian ethnicities such as Kazakhs, Uzbeks, Uighurs etc. while in northern ones their share was often less than half. and 65 to 75 per cent of the population was composed of Russians.

The main share of immigrants from abroad are ethnic Kazakhs who arrived from Uzbekistan, Mongolia, China or Turkmenistan, and who suffer actual problems of adaptation and integration in the socio-

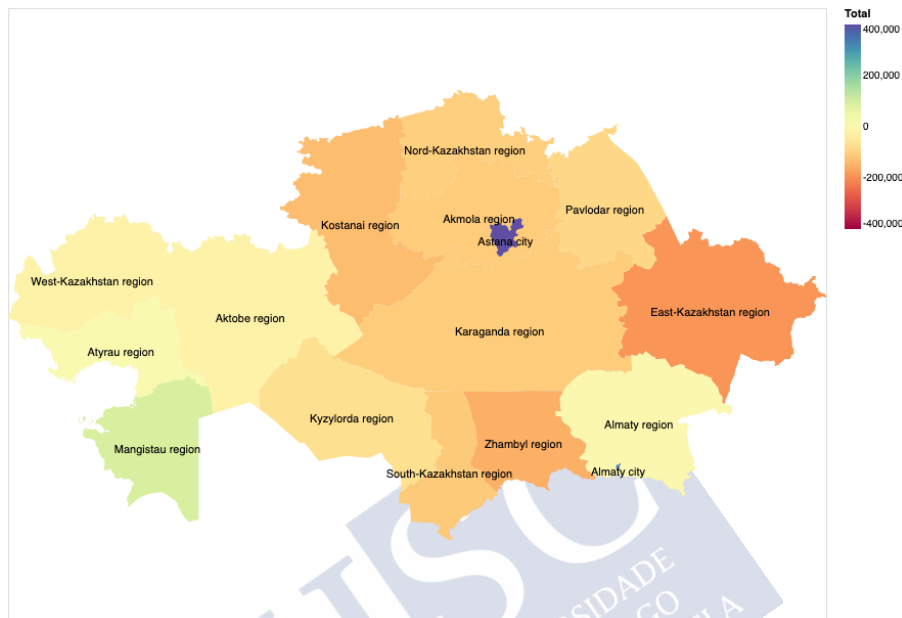
³⁹ The red dashed line represents the date of creation of the new capital, Astana.

economic and cultural life of the country. According to Government Resolution⁴⁰ from 2014 Astana and Almaty cities were not included as resettlement places for repatriates, but most of them tend to settle in the capital and major regional centres, where it is easier to find a job.

Astana, Almaty and the Mangistau region (where most of the oil rigs are located) were the regions with higher positive net migration flows during the last decade and a half, while East-Kazakhstan, Zhambyl and Kostanai were the ones with higher negative net migration flows. To a large extent, the formation of the new capital made Astana the main focal point of external and internal migration, because almost the entire state apparatus of the country was relocated to the new city. Of course, the southern and former capital, Almaty, is still a pole of attraction of migrants, due to its size and location close to the border. A large flow of internal migrants, mostly of working age were of the attracted by the discovery of oil and gas fields, and the correspondent large amount of construction and the creation of new jobs in the Caspian regions. The population moved to the area in search of work or to choose them as a place of residence, as a guarantee of their economic and social well-being.

⁴⁰ Government Resolution of July 8, 2014 № 783

Figure 10. Net migration flows in Kazakhstan’s regions during the period 2000-2016



Data source: KazStat.

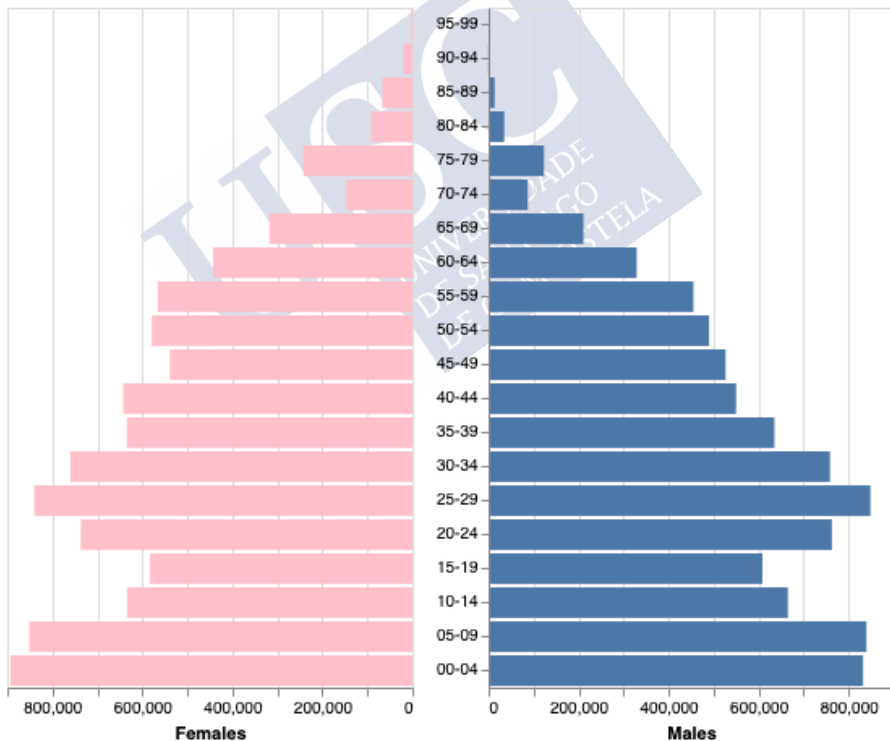
According to results of the 2009 census, slightly more women than men emigrate from Kazakhstan, while the reverse is true for immigrants to Kazakhstan. The level of education of migrants is mainly low, but relatively higher among internal migrants. Among age groups, the most mobile population is youth aged 15 to 29 years.

One should note here that ethnic repatriation at the same time appeared as a symbolic act of restoration of historical justice, which strengthened the perception of a new government as the leadership, acting primarily in the interests of the Kazakhs, and an important tool for replenishment of the migration outflow and to change the demographic balance in favor of the Kazakhs. In addition, the arrival

of ethnic Kazakhs from abroad was intended to increase the number of carriers of the Kazakh language and culture that would change the socio-cultural image of the country.

Internal migration in Kazakhstan is characterized by intensive migration of the economically active population of the villages and environmentally disadvantaged regions to regions with more favourable economic situation, thereby increasing the share of the working age population in the host regions.

Chart 22. Population Pyramid of the Republic of Kazakhstan, 2016.

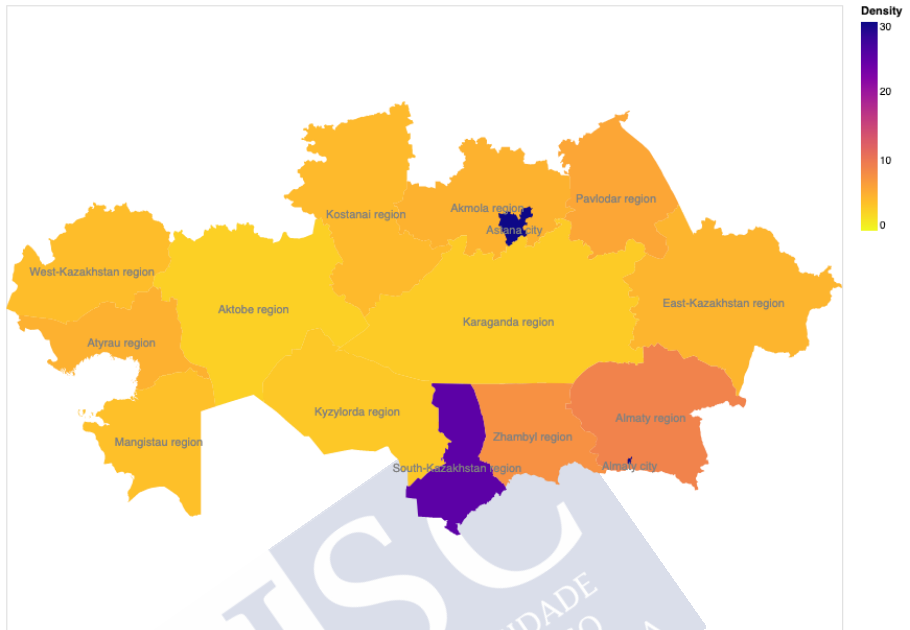


Data source: KazStat.

By type of demographic structure, the population in the Republic of Kazakhstan is experiencing a transition period from the third stage (with a relatively high birth rate and low mortality) to the fourth stage, with lower birth rates. In the past ten years there is a transition to the modern model of reproduction of the population, as there is growth in the share of the population in the age group older than 60 years, as well as a decrease in the total fertility rate to 2.3, lower infant mortality rates and increases in life expectancy to 70 years and above. Kazakhstan's population pyramid has a stationary type. Countries with such type of pyramid usually have declining birth rates and relatively low death rates, as is common in developed countries.

Kazakhstan average population density is 6.5 people per square kilometre, as of May 2016. Due to the vastness of its territory the population in Kazakhstan is distributed rather unevenly with the highest density (apart from Almaty and Astana) recorded in agricultural regions of the South.

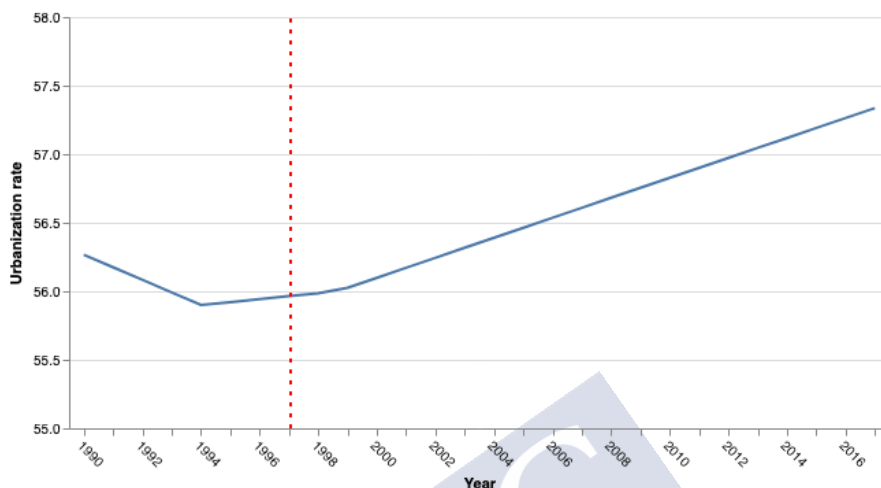
Figure 11. Population Density of Kazakhstan's Regions, 2016.



Data source: KazStat.

Following a short drop immediately after independence, the share of population living in cities in Kazakhstan returned to a path of steady growth that put it well above 57% during the past decade.

Chart 23. Urbanization Rate of the Republic of Kazakhstan.



Data source: World Bank. *World Development Indicators*

Almaty, Kazakhstan's largest metropolis, served as the country's capital until 1997 and remains Kazakhstan's trading and cultural hub. Its population was a little over one million eight hundred thousand people at the beginning of 2018. The second city in size is the capital of Kazakhstan, Astana, with something over one million people at the same date, and it is also the city with greatest population growth in the country.

Since 1997, due to the dislocation of the parent bodies of the republic management and relocation of the authorities, there has been a dramatic increase in population and the arrival led to a positive balance of migration. The main migration flow observed from other regions of the country to new capital that is interregional migration. Summarizing we can say that from 1998 to the present, the difference between the number of people inflow on the territory of Astana city

and the number of outflow is in comparison with earlier periods shows a constant surplus.

The main reason for the increase of the city's population is internal migration, that is affected by the following socio-economic factors:

Growth of industrial production by reconstruction of existing activities and opening of new ones.

Employment of the population in the implementation of investment projects of life.

Development of the small business and enterprise sectors.

Employment in alternative sectors of the economy.

Higher average wages.

Improvement of infrastructure and life support systems.

Internal migration in Kazakhstan is characterized by intensive migration of the economically active population of the villages and environmentally disadvantaged regions in the regions and cities with more favourable economic situation, thereby increasing the load on the infrastructure, contributing to the growth of social tension in the host regions. The main reason of internal displacement remains unfavourable socio-economic situation in places of their former residence, like, no work, remoteness from the cities or the lack of appropriate infrastructure of the village, and others.⁴¹

From a position of economic growth the Republic of Kazakhstan it is necessary to build an effective migration policy to meet the requirements of the national economy in qualitative and qualified

⁴¹ Smailova (2010).

force. By creating the conditions and incentives for the relocation on the permanent residence of qualified professionals, the development of differentiated mechanisms of attraction, selection and use of foreign labour. For the Republic of Kazakhstan, “brain drain” is a urgent problem. This affects the decline in the quality of human capital, reproductive behaviour and social relations that hinders the growth of the economy.

The Government should develop a training system for municipal services necessary for function affecting the structure of the labour sector and directing activities in the interests of the entire population. Such a policy will promote the adaptation of internal migrants in urban areas, preventing their departure in the informal sector. On the issue of socio-cultural, psychological adaptation of internal migrants in big cities, this is a two-way process, and the value here is the perception of the local population.

3.4 REGIONAL SPECIALIZATION

The number of employed population has increased by 1.6 times from the previous 1999 census. The share of women increased significantly by 3.2 percentage point, standing at 45,2% of all employees. Employment in rural areas has also increased, which led to an increase in the share of employment in rural areas by 3.2 percentage points or 44,7%.

The share of employed people aged 15 and above increased by 38,6% to 54,3%. The share of employed female population increased by almost 1.5 times (49,4%), at 46,4%, and that of the male population grew by about one-third (30,7%) and amounted to 63,1%. Employment in most active working-age groups 25-54 ranges between

70 and 77%, including four-fifths of men and about two-thirds of all women. Even upon retirement, 14.1% of men aged 65-72 and 11,9% of women aged 60-64 years continue working.

In 2009, educational attainment of employed population has increased significantly from 1999. Thus, the percentage of employed people with higher education grew by 28,3% to 272 per 1000 employees, including 31,2% men and 23.8%. Educational attainment of employed youth has improved significantly. Thus, 36,5% of employed youth aged 25-29 obtained higher education an increase from 1999 by 1.9 times, from 19,1%. The share of employed youth with higher education in the 20-24 age group grew even more 2.2 times, reaching 27.3% up from 12,6%.

Educational attainment of employed people varies notably among ethnic groups living in Kazakhstan. The share of employed Kazakhs with higher education is slightly above average 30,2% and that of Dzungars and Kurds is relatively low 8,9% and 8,3%. The share of workers with vocational secondary education is noticeably above the national average among Russians, Ukrainians, Belarusians, Tatars from 37 until 39,3%, and slightly lower among Uyghurs, Turks and Kurds have a significant share of workers with secondary education. The share of employees with secondary education is noticeably above the average among Azerbaijanis, Chechens, and Kyrgyz 40,2% - 43,1%.

The employment rate of economic activity by sector shares of total employment in the three main areas: employed in agriculture, industry and services. For convenience, we use data on employment by several sectors to see major changes in the structure of employment, and the determination of the stage of economic

development. For each of the integrated sector groups employment is defined as the respective share in total employment. The indicator reflects the trend of growth and reducing employment in each sector, highlighting the differences in dynamics and level of employment.

According to 2009 census data the largest part of the working population is concentrated in agriculture 17,9%, education and healthcare 15,4%. They are followed by trade 12,9%, industry 11,5%, construction 8,9%, transport and communications 8,1%. The public administration sector employs 6,5% of all employed population. An important factor in the performance trend analysis is determining the flow of employees between sectors. This allows you to identify the sources of productivity growth within a single sector and the flow of labour across sectors. As a result, to trace the movement of workers from sectors with low productivity in the sector with high productivity and, also enables to trace the dynamics of employment in each of these sectors.

The international distribution of economic wealth continues to maintain a close relationship with the distribution of employment by sector of economic activity. In more affluent countries the largest share of the employed population in the services sector, while the backbone of the economy of the less affluent countries, mainly agriculture. Public administration and defence, compulsory social security with human health and social work activities 1/3 from other services.

The economic performance assessment for Kazakhstan reached broadly favourable conclusions about the country's economic development as a; Kazakhstan's growth has been strong stimulated in large part by the oil sector and GDP Annual Growth Rate in

Kazakhstan averaged 5.27 percent from 1995 until 2016 a major improvement from negative in the 1990s.

Kazakhstan is the largest economy in Central Asia. The services sector is the most important and accounts for 54 percent of total GDP. The biggest segments within services are: wholesale and retail trade and repairs of motor vehicles and motorcycles 15 percent of total GDP; transport, warehousing, information and communication 10 percent; real estate 9 percent and professional, scientific, technical, administrative and support services 7 percent. Industry contributes 34 percent of the wealth; construction 7 percent and agriculture, forestry and fishing 5 percent.

An absolute amount the GRP in each region is an objective indicator of the development of the national economy, as gross regional product is in the structure of almost 90% of GDP. As an integrated component, GRP characterizes the level of economic development and economic performance of all economic entities in the region. Lack of a unified concept of territorial development is a limiting factor in the development of the overall economy and the gap in levels of economic potential of regions

As of 2014 the share of the four regions of Kazakhstan (Atyrau, Karaganda regions, Almaty and Astana cities) accounted for more than 41,8% produced in the country of GRP. On the other hand, the share of the four regions with low production volumes GRP (Akmola, Zhambyl, Kyzylorda, North-Kazakhstan regions) constitute 3,38% of the total.

The largest share for several years occupied Atyrau and Karaganda regions and cities Almaty and Astana. This is due to the fact that in recent years development of the services, including of the

telecommunications, credit and financial, insurance and other sectors of the economy, as well as a very dynamic development of the oil industry. Due to the rapid pace of construction of administrative and residential destination Astana city, strengthens and enhances its status as an economic, political and cultural centre.

The share of individual regions in GRP structure has changed markedly. According to data for the period from 2002 to 2014 there was a redistribution structure among regions. Significantly increased the proportion of the oil-producing regions; such as, Atyrau in 2.7 points, Kyzylorda in 1.2, Aktobe in 1 point and Mangistau in 1.5. At the same time, the trend decline in the share of GRP in industrialized regions, for example in areas such as the East-Kazakhstan in 2 point, a decline of 1 point in Karaganda, Kostanay, South Kazakhstan, Pavlodar and North Kazakhstan regions. Then, from 2011 to 2014, we see a decline in the share of GRP in the oil producing regions in 2.3 points in the Atyrau and Mangistau region in 1 point. And a slight increase in the share of GRP in densely populated regions such as Almaty, Zhambul and South Kazakhstan regions.

According to the obtained structure we distribute the regions conditional groups according to their contribution to the gross regional product. The first group of Kazakhstan's regions with the highest rate, included regions share exceeds more than 7% of the GRP such as cities Almaty - 20,9% and 10,3% in Astana, Atyrau and Karaganda regions 10,2% and 7,4%. In 2014, this group occupies in the total volume of produced GRP 41,8%. Compared with 2010, when the contribution of these regions to the gross regional product amounted to 47,7%. The contribution of the group with the lowest rate in the GRP is about 4% in 2010 and 3,7% in 2014. The list of regions in this group over the years has not changed: Akmola, Zhambyl, Kyzylorda

and North Kazakhstan regions. In 2005 the share of the first group exceeded, the share of the fourth group in the GRP 4.8 times, and in 2010 this gap had increased to 12 times, in 2014 this trend will remain at the same level. The trend of levelling the economic development and improve the quality of economic space caused by the growth of GRP in all regions of the country is unstable.

The process of economic reforms in Kazakhstan is well traced in the structure of gross domestic product, for which the following are typical progressive changes. The share of the production of goods has decreased and the share of production services. These changes are due to a number of factors. On the one hand, the decline in the share of construction and agriculture, and on the other an increase in the share of trade, transport, communications, and other service industries, as well as higher prices in the service sector. Such a change in the structure of GDP consistent with modern global trends

Growth in industrial production is one of the most important factors of economic growth of the country. This is due to the fact that in the structure of GDP occupies the bulk of the industry, it is on average 30% of GDP. According to the predominance of the share of certain sectors in the regional economy can be divided into four groups: raw materials, industrial, agro-industrial, financial and services.

The first group consists of regions rich in natural resources and specializing in oil and gas industries. Such as: Aktobe, Atyrau, West Kazakhstan, Kyzylorda and Mangystau regions.

The second group are the regions with a high level of industrial development: East Kazakhstan, Karaganda and Pavlodar regions.

The third group consists of areas with predominance in the economic development of agricultural production with a certain development of the industry. Such as: Akmola, Almaty, Zhambyl, Kostanai, North Kazakhstan and South Kazakhstan regions. In the agro-industrial regions of pronounced specialization industry is agriculture. They produce more than 65% of gross value-added agriculture.

The fourth group consists of Astana and Almaty cities, where the focus financial and intellectual capital. A special position in the specialization occupied by financial services. Despite the fact that the volume of industrial output is 2 times lower than the average national level, through the development of construction and services (trade, hotels and restaurants, transport and communication, real estate, health care, education and etc.), These regions are share in GRP occupy leading positions. The regions with GDP per capita above the national average are Atyrau, West Kazakhstan, Mangistau, Aktobe, Pavlodar regions and Almaty, Astana cities.

In the first place in excess of the national average GRP per capita from 2002 to 2014 increased by 7.34 times in the Atyrau region. And the lowest level for this indicator in 2014 covers the South Kazakhstan, which had only 38,4% of the average production of GRP per capita. The gap between regions is quite significant in 2014 the highest rate exceeded the lowest rate of about 8 times.

The growth rate of GRP per capita relative to the average level observed in oil-producing regions such as Atyrau, Aktobe, West Kazakhstan and Mangystau regions and Astana, Almaty cities. In other regions, there is a decrease of this indicator. The highest, compared with the average level in the republic's GRP per capita was

formed in the two oil-producing regions of the country in Atyrau 306%, Mangystau 159% regions and in the cities of Astana and Almaty 213,7% 222,6%. Among the regions with developed industry GDP per capita above the average level observed in Pavlodar region 102,8% West-Kazakhstan 135,03%. Below the national average figure of 44,5% of Almaty, Zhambyl 39,4% and South Kazakhstan 38,4%.

3.5 BUILDING CAPITAL CITIES AS TERRITORIAL PLANNING POLICY

It takes an in-depth analysis of the geography properties of Kazakhstan in order to understand the demographic and geographical structure, the reason why moving its capital was necessary, its culture, troubles, pros and cons. Having a quite large surface area, Kazakhstan is situated right in the heart of European geography, putting the country in a strategic position bridging over between Russia and China, which, in turn, is quite likely to pose a threat to its nation wise security.

Changing capitals has a historical significance and uniting power for all states. It has been witnessed repeatedly throughout the history that most countries preferred to dislocate their capital. Such a radical decision made by Kazakhstan is rather a historical attempt considering the solution of its then current troubles when no other dislocation of a capital throughout the history was as effective as that from Almaty to Astana. Kazakhstan had to solve all of the foregoing problems in a single move, which was equally important for its geopolitical and geostrategic position. Kazakhstan gave birth to Astana and became a symbol of the country's independence and integrity.

Almaty has an orderly environmental planning, established on the Tanri Mountains skirts, it is all green to an extent that houses are well-

hidden in the green belt and, also the province enjoys a good geopolitical position. But there were problems such that the province was only 302 km distant from the boundary with China, was situated on the seismic zone, and thereby frequently subject to earthquakes. Also, Almaty was having difficulties with ensuring integrity throughout the country. Geographically situated in South Siberia, Astana is a province where winters last nearly 8 months with the temperature decrease to -40°C and to strong winds. And yet, despite the prevalence of harsh climatic conditions and difficulties of construction and living, Astana has an excellent geostrategic and geopolitical position, which determined by several factors are prime location in the central part of the country that is the center of communication, transport, rail, road and air routes and social and political stability in the region and favorable ecological conditions. In addition, the city has significant resources for future urban development, because it has a large free area for settlement, employment and industrial potential.

Astana's administration is promoting the development of small and medium-sized businesses through the cooperation of the Sovereign Welfare Fund Samruk-Kazyna and National Economic Chamber. A special program of crediting provides support. As a result, the number of small and medium-sized businesses increased by 13.7% to over 96,000 compared to the previous year as of July 1, 2015. In addition, the number of people employed in small and medium-sized business increased by 17.8% to over 234,000 people as of April 1, 2015.

The result of both natural and migratory movement of the population for the period 1989-1998 in the city was changing its number of the population, socio-demographic and national

composition. According to the national census 1999 the population of Astana has made 319 thousand. Compared with 1989 the number of Kazakhs group increased by 2.7 times. Their share reached 41,8% against 17,7% in 1989. The share of Russian and Ukrainians declined from 54,1% to 40,5% and from 9,3% to 5,7% respectively, which is a consequence of emigration and depopulation, characteristic of these ethnic groups (see Table). In general, reducing the number of Russian, Ukrainians, Germans, Tatars, and Belarusians in Astana coincides with the nationwide trend of reducing the proportion of ethnic groups in the population.

Comparison of migration trends in the "two capitals" - Astana and Almaty demonstrates the most attractive for migrants, both in terms of economic prospects, and in terms of access to cultural achievements, professional growth opportunities. Almaty, in view of the accumulated economic, social and cultural potential remains attractive for the population of the whole country, but especially the southern region, and Astana - mainly for the residents of the northern and central regions.

In the analysis of migration flows in Astana revealed that people coming to the city mainly for interregional and intraregional migration, primarily because most of Akmola region. For example, 13975 people of the total number who arrived in the city in 1998, 13214 people (94,6%) arrived at the internal migration. Of these, 5 thousand people, or 37,9% came from Akmola region, 11% from North-Kazakhstan, Karaganda 10,8% from 10,5% of the Kustanai region, as well as from Almaty - 1897 people or 14,4%. With regard to the migratory flow from Almaty, a socio-professional group mainly represents it, as public servants.

The achievement of ethno-demographic balance, stimulation of migration of Kazakhs group from the south to the north of the capital one of the main transfer targets. However, the number of Kazakhs group are involved in inter-provincial migration in Kazakhstan is 0,7% of the total population in the country. If we take into account intra-migration, the share of Kazakhs group involved in internal migration, will be 1,5%.

Until now, changes in the population, including the various ethnic groups in Astana took place mainly due to intensive emigration of the Slav peoples and the Germans. However, the involvement of Kazakhs in Astana migration and the predominance of the indigenous population in interregional exchange increase, and this can be interpreted as a steady trend. Installation on the construction of the nation-state, the political dominance of the titular nation creates favorable conditions for the ethno-demographic component of the population in the whole country and in the capital region, in particular, has changed in favor of the Kazakh ethnic group. Closer looks at this issue later distinguish.

So sum up, the reasons for shifting the capital according by next factors: (1) ethno demographic achieve regional balance by stimulating the migration of labor surplus from the southern regions to the industrialized northern cities, the involvement of Kazakh ethnic group of the population in the industrial and agricultural production in central and northern Kazakhstan and the capacity territorial integrity and preventing separatist sentiments and movements. The increased inter-ethnic tensions in the Kazakh society, the risk of secession of predominantly Russian-speaking North-Eastern Kazakhstan; (2) Almaty geographically exhausted the possibilities of further development and is dangerous ecologically. Astana is positioned as a

great location in the center of the republic, although in fact it is located in northern Kazakhstan, and (3) by the foreign policy factors of the capital moving should include the location of Almaty on the southern borders of the country, near the Chinese border.

As a conclusion, in terms of rural Kazakhs ethnic group population growth and migration increase mobility within the country (mainly in Almaty) authorities sought to redirect flows of Kazakhs ethnic group, from the village to the town and de russify predominantly Russian-speaking northern region. Moving the capital to the geographical center of the country contributed to the strengthening of the territorial integrity of the state, redistribution of investments, accelerating the development of new capital infrastructure.

Urbanization creates new opportunities for Kazakhstan. As urbanized areas contribute to the growth of non-oil GDP, the urbanization process in Kazakhstan is of crucial importance for the country's development in the long-term. From the perspective of regulatory mechanisms, agglomeration is a strategic tool for the integrated development of territories. Agglomeration may be a win-win strategy both for the core city (solution to urban problems: partial relocation of process units out of the city; transport and utility infrastructure development; building recreational capacities, etc.) and the suburban environment (higher level of the engineering, social and cultural services). Given the country's vast territory and huge distances, metropolitan agglomerations occupying vast territories are key for arranging the economic and social life on large areas around them. They improve the investment opportunities of the area, acting as centres of gravity for production and ground-breaking technology, which in turn increase capacity of regional markets as a basic element

of the country's spatial development and may be a mechanism for equalizing the levels of territorial development.

In most countries, the agglomerating effects are most notably seen in cities with a population of over 1 million. Given the low population density in Kazakhstan, only cities with a population of more than half million (or a group of related neighbouring towns) may produce these effects. Only the South of Kazakhstan enjoys a higher population density and a relatively well-developed transport infrastructure. Service industries are very important for its agglomeration effects. In case of prevalence of industrial specialization, the process of tertiarization of the urban economy is slower, especially in company towns with just one or a few large companies. In Kazakhstan, Almaty, Astana, Shymkent and Aktobe have the greatest concentration of service activities, so the goal was to build centres of economic growth in the regions, with these four cities in the first level of the urban system. The second level are the regional capitals plus the cities of Semey and Turkestan. The third level are small company towns.

Let's consider the international experience about the relocation of capital cities, starting from the case of Brazil. In this case, two main reasons were offered for the change: the need to move from the coast to the geographical centre of Brazil in order to enable the full development of all regions of the country and not just the south-eastern states, and a military reason in the context of the Cold War. These reasons were not accepted without resistance, as most public officials and politicians did not want to move from Rio de Janeiro to Brasilia, where there is no sea, no beach, nor the same infrastructure for business and leisure as in Rio. Many civil servants still today refuse posts in Brasilia and seek a place in Rio or Sao Paulo. In the end, the creation of Brasilia helped Brazil only partially to achieve the

uniform development of all regions in the country. The Rio-São Paulo axis continues to this day to be the business centre and economic engine of the country, making today's Brazil a three-capital country in practice: São Paulo the economic capital, Brasilia the political capital, and Rio de Janeiro the cultural one.

The unification of Germany resulted, after much debate in the Bundestag and a vote with a narrow margin, in the transfer of Bonn's government and parliament to Berlin as the capital of a united Germany. According to the Bundestag Law, Bonn retained important policy functions, retaining six of the fifteen federal ministries. The transfer of the capital from Bonn to Berlin was a symbolic gesture emphasizing the conclusion of the reunification, and prompting a major renovation of Berlin's urban infrastructure.

The most frequently voiced official reason for the transfer of the capital of the RK from Almaty to Akmola is the geographical one. Almaty is located in the extreme south-east of the country, which greatly complicated the governance processes and the functioning of the administrative system of the state. Akmola, on the contrary, is positioned in the heart of the republic, halfway between the Russian-speaking industrial North and the agrarian South. Moving the capital to Akmola allowed to ensure equidistance of centre and periphery, increasing the functionality of the system and ensuring closer contact with the regions as well as the inflow of ethnic Kazakh people to the northern part of the country, contributing the harmonization of demographic and ethnic situation in the country. The transfer of the capital contributed to the strengthening of the territorial integrity and sovereignty of Kazakhstan by reducing manifested sentiments of separatism in the north. Furthermore, the unresolved territorial and border issues with some neighbouring countries made the close

proximity of Almaty to the border a real threat to security in the event of a military conflict. The transfer of the capital to a more secure area reduces the dependence of the state from possible risks. Because of its piedmont situation, Almaty had already exhausted the possibilities of further development, both geographical and environmentally. Besides, it is situated in an area of high seismic activity, prone to devastating earthquakes.

Astana, the new capital built on the city previously called Akmola, was designed as a new focus point for the growth of Kazakhstan's economy that could contribute to a more equitable development of all regional centres, through its multiplier effect. The transfer of the capital became an important part of the systemic reforms aimed to modernize the whole of Kazakhstan. The relocation of the capital to Astana completed the first stage of the reform of the political and economic system of the country, aimed at creating and strengthening mechanisms for effective strengthening of the state in terms of democratic development.

Astana was seen as a new growth point of Kazakhstan's economy and the development of all regional centres as a whole. Astana gave a multiplier effect for the economy of the country and began to set the pace of development of the entire state.

Objective reasons for the transfer of the capital to the central part of the country, including

1. Seismologic - the area of the former capital position is an area of potential seismic danger and the possibility of devastating earthquakes, in this case, the transfer of capital possible to avoid seismic hazard administrative centre of the country.

2. Stabilization - Almaty is located in the south of the country, which greatly complicated the governance processes and the functioning of the administrative system of the state. Moving the capital to Astana allowed to ensure equidistance of centre and periphery, increasing the functionality of the system and ensuring closer contact with the regions.

3. A Foreign policy - the big risks for the security of the Republic of Kazakhstan is the unresolved territorial and border issues with some neighbouring countries. The close proximity of the capital city to the border poses a real threat to security in the event of a military conflict. In this case, the transfer of the capital to a more secure area of the operation reduces the dependence of the state from possible risks.

Kazakhstan is actively developing integration ties with neighbouring countries. In this case, the transfer of capital reduces the dependence of the functioning of the state against the possible risks in a safe area. Astana has the potential to become a focal point of regional policy, trade and economic and financial centre of the region. And as a consequence of the significant potential of the city is geographical location.

4. Internal political - the transfer of the capital to Astana allowed to bring together North and South of the country, ensuring the inflow of indigenous people in the northern part of the country. In this context, the transfer of secured harmonization of demographic and ethnic situation in the country. The transfer of the capital contributed to the strengthening of the territorial integrity and sovereignty of Kazakhstan, reducing manifested sentiments of separatism in the north.

5. Socio-economic - the process of transferring the capital gave impetus to socio-economic development of the northern regions of the country, ensuring the inflow of labour migration from other regions of the country, stimulating the production of construction and development of communications in the area.

Moving from labour-surplus regions of Kazakhstan to the north of the country with a labour shortage. The main measures of state support for such persons be compensation for travel expenses, provision of service housing and rooms in hostels, training in vocational training courses, retraining and advanced training, assistance in finding employment in the new location.

Kazakhstan has enjoyed an obvious trend of population clusters in several metropolitan areas. There are including Almaty (all the money here), Astana (the civil service, you can make a career, and other work is complete), Shymkent (closest to those who came from Uzbekistan), Aktau (you can earn big money). Therefore in these four points on the map of Kazakhstan fixed the migration flows.

Astana's administration is promoting the development of small and medium-sized businesses through the cooperation of the Sovereign Welfare Fund Samruk-Kazyna and National Economic Chamber. A special program of crediting provides support. As a result, the number of small and medium-sized businesses increased by 13.7% to over 96,000 compared to the previous year as of July 1, 2015. In addition, the number of people employed in small and medium-sized business increased by 17.8% to over 234,000 people as of April 1, 2015.

In our research we want to pay attention for the “Astana –the New City” special economic zone (SEZ) which was established in 2001 to

develop industry and increase the attractiveness of the city to investors. For 2008-2012 in the SEZ "Astana-the New City" produced goods for the sum of 72 billion tenge, that is about 1/3 share of the total output of all SEZs. The special economic zones "Astana- the New City" is the leader with strongly surpassing in the economic power other zones.⁴²

Creation of special economic zones can be effective tool of the state economic policy. Though the contribution of SEZs in the Republic of Kazakhstan's economy is not so great yet, but their role in attraction of direct investments in non-raw material resources and innovative productions, as well as integration into the global trading system is extremely important.

Kazakhstan is under populated not only from the perspective of the natural environment but also from the perspective of political control and economic growth that borders China and making Almaty an insecure place. Almaty's location was better for connecting the Central Asian states to each other but not good connect the regions of Kazakhstan itself.

Nevertheless, one should accept that the role of Kazakhstan's new capital in national identity formation. Astana is a centrepiece of the official nation-building project in Kazakhstan. Astana is a project produced by the government concerning the development of Kazakhstan and the Kazakh nation. In terms of this Kazakhstan is at the stage of deciding whether to continue to construct a civic society through Eurasian concept, or to develop the idea of ethnic nationalism. However, we can say that Kazakhstan is still far from the transformation into ethno-centric state since despite the capital's move

⁴² Kazhyken (2008).

and changes in the landscape, there is no radical ideological shift happened until now.

However, we also agree that may we doubt on the notion that capital moves cannot be in the public interest and say that projects of such an enormous scale are easier to pursue in the absence of democratic procedures. Or according to decision of the leader might accept the enormous financial costs of such a move because they anticipate future symbolic, political, and economic gain

Moving from labor-surplus regions of Kazakhstan to the north of the country with a labor shortage. The main measures of state support for such persons be compensation for travel expenses, provision of service housing and rooms in hostels, training in vocational training courses, retraining and advanced training, assistance in finding employment in the new location. Kazakhstan has enjoyed an obvious trend of population clusters in several metropolitan areas. There are including Almaty (all the money here), Astana (the civil service, you can make a career, and other work is complete), Shymkent (closest to those who came from Uzbekistan), Aktau (you can earn big money). Therefore in these four points on the map of Kazakhstan fixed the migration flows.

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medium-sized business increased by 17.8% to over 234,000 people as of April 1, 2015.

After gaining capital status and organization of the special economic zone "Astana - new city", which is experiencing an unprecedented rapid growth for the CIS, the city has become the second largest in the country, and it is implemented in a variety of modern architectural and urban planning projects. The population increased from 270 thousand in 1996 to around 1000 thousand in 2015, the city and the area is significantly expanded to an area of over 700 square kilometers due to the construction of a new administrative and business centre and other neighbourhoods nearby. According to the project "Inter-regional territorial development schemes Astana agglomeration", 2015. This document were determined the boundaries of Astana agglomeration with total area of 21,750 square kilometers, which include 127 settlements. The boundaries of these commuters lived 196 thousand, and live in the city of Astana 814 thousand. The population density suburban areas of Astana accounted for 9 people. km² (average population density in all of Kazakhstan about 7 people per km²). Agglomeration development project envisages that by 2020 it is expected that the population of the agglomeration will increase to 1.2 million, and by 2030 - to more than 1.5 million people. This is only possible in case of pursuing consistent policy of facilitating spatial agglomeration of people, knowledge and capital around long-term growth pole

Astana hosts a number of coordinating bodies of the Eurasian Economic Community, and big events, including sports. For example, in 2011 Astana hosted the 7th Asian Winter Games. Also, and in 2017 the city took the international specialized exhibition Expo 2017.

Moving the capital to Astana secured the modernization of the city, developing modern infrastructure and communication, encouraging demographic growth of the city population. At this stage of development of the city continues, which may be expressed as follows - for the past seven years, the GDP of Astana has increased by 10 times. The share the total volume of GDP increased by 3 times. Tax revenue increased by 11 times, the volume of investment in fixed capital increased 10 times, and this year will be 170 billion tenge. The number of foreign companies in Astana has increased 10 times, from 40 to 400. In a small business in Astana today, 65 thousand people are involved. Over the past seven years the wages increased by 3 times.

Astana is in first place for the development of investments in the Republic of Kazakhstan. Astana is a member of the International Association of Capitals and Cities of the CIS countries, voluntary non-profit association formed by the executive and representative power capitals and major cities of the CIS countries for the organization of joint actions for socio-economic development. Astana expands the geography of foreign economic relations and trade and increased its export potential, as a result, a steady growth of foreign trade turnover of the city.

Today, the country in terms of socio-economic reforms ahead of other CIS countries, including Astana being in the center of the republic, the main triggers of the state development strategy. The capital of Kazakhstan Astana objectively becomes the center of economic growth. The decision to move the capital has become a strategically effective way to reduce existing risks and to ensure security and stable development of the state.

The scale and timing of the project is historically and politically important move for the future of the Republic of Kazakhstan, which identified new areas of the country. Despite pessimistic forecasts, it is worth noting that they were not justified. Proof of this can serve today's rapid pace of development of Astana, which allow us to speak about the great prospects of Kazakhstan's capital in this century.

The world will change dramatically by 2050, and urbanization will have a key role in this: (1) in the next decade, more than 70% of economic growth will be generated by cities (centers of social development and technological innovation); (2) world-class cities will be a significant advantage in the international race for talent, capital and consumer demand, and (3) Kazakhstan will need to bring several cities up to the world level in order to achieve its goal of joining the top 30 developed countries in the world.⁴³

Urbanization creates new opportunities for Kazakhstan. Urbanized areas contribute to the growth of non-oil GDP. The urbanization process in Kazakhstan over the next 15-20 years is of crucial importance for the country's development in the long-term. The task of paramount importance is to ensure proper sequence of steps to set initial conditions, since those will either significantly promote, or deeply inhibit, urban economic growth.

From the perspective of regulatory mechanisms, agglomeration is a strategic tool for the integrated development of territories. The core city wins (solution to urban problems: partial relocation of process units out of the city; transport and utility infrastructure development;

⁴³ Ministry of Regional Development of the Republic of Kazakhstan Regional Policy Department. Kazakhstan Regional policy: establishing economic growth centers, Astana 2015

building recreational capacities, etc.) The suburban environment wins, as well (higher level of the engineering, social and cultural services).

Given the country's vast territory and huge distances, agglomerations are in particular demand in specific conditions of Kazakhstan. For example: metropolitan agglomerations occupying vast territories are capable of arranging economy and social life on large areas around them. Consequently, improve investment opportunities of the areas (centers of gravity for production and groundbreaking technology). Which in turn will increase capacity of regional markets as a basic element of the country's spatial development and may be a mechanism for equalizing the levels of territorial development.

Agglomeration development factors.

1. In most countries, agglomerating effect is most notably seen in cities with a population of over 1 million. Given low population density in Kazakhstan, only cities with a population of more than 0.5 million (or a group of related neighboring towns) may produce agglomerating effect.

2. Urban growth is faster with a higher population density and relatively well-developed transport infrastructure, which is only typical for the south of Kazakhstan at this stage.

3. Service industries are most important for the agglomeration. In case of prevalence of industrial specialization, the process of servitization of a city's economy is slower, especially in company towns with one or a few large companies. In Kazakhstan, Almaty, Astana, Shymkent and (in the future) Aktobe have the greatest prerequisites for development of agglomeration processes in the medium term.

According to the Ministry of Regional Development has drafted an integrated Regional Development Program for the period through 2020 that incorporates all the tools and resources of the existing sector programs (Regional Development Program, Company Town Development Program, Ak-Bulak, upgrade of housing services and utilities, Affordable Housing Program), which will be allocated on a priority basis for development of agglomerations.⁴⁴

Long-range pattern of the country's spatial development until 2020 where Regional Development Program (2/3 of which is focused on agglomerations) are inter-regional development plans until 2020 are approved for each agglomeration; memorandums between a city and a region for development of agglomeration are signed, and guidelines for determining agglomeration boundaries are formulated. Special section on reduction of economic distances between agglomerations has been included into the State Program for Development of Transport and Communication Infrastructure until 2030.

With regard to agglomerations, the integrated regional development program envisages achievement of specific performance indicators by 2020 in terms of increased population in agglomerations, new housing construction and modernization of infrastructure networks (heat, gas, electricity, water supply and sanitation).

In 2014, a clause was introduced to the Budget Code of the Republic of Kazakhstan saying that the Ministry of Regional Development (working body of the Interdepartmental Commission for Regional Policy of the Government of the Republic of Kazakhstan) is

⁴⁴ This project was approved at a meeting of the Government of the Republic of Kazakhstan on June 10, 2014.

involved into the budget planning process and coordinates local budget-financed investments proposed by other government bodies based on the established regional priorities. To implement this provision identified regional priorities (criteria) and formulated the procedure for consideration and coordination of local budget investments financed by the national budget to ensure these meet regional priorities.

To conclude, begin with Kazakhstan moved its capital for a number of official reasons, many of which were geographic. One of these reasons included problems of urban geography specific to Almaty, the old capital. Almaty was located in a zone of strong seismic activity. Another problem that location of the old city was the Zailiiskii Alatau Mountains prevented urban expansion to the south and east, cramping the city's economic prospects. And not the last reason was pollution problem that trapped airborne between mountains contaminants creating moderate to severe air pollution in the city.

Time has shown that the transfer of the capital became an important part of systemic reforms to modernize the whole of Kazakhstan. The relocation of the capital to Astana completed the first stage of the reform of the political and economic system of the country, aimed at creating and strengthening mechanisms for effective strengthening of the state in terms of democratic development. The capital of any state - a strategic object number one, and thus to ensure the full functioning of political, economic and cultural center of the country is one of the priorities of the security policy. Meanwhile, transfer of the capital of the Republic of Kazakhstan has a strategic importance for a stable and secure development of the country at the present stage.

3.6 CONCLUSIONS

The project of relocating the capital of Kazakhstan from Almaty to Astana was financed partially with funds from the NFRK, as part of the development strategy of the Republic. This project is not merely symbolic. Instead, it is a significant measure of territorial planning policy involving both geopolitical and socioeconomic considerations.

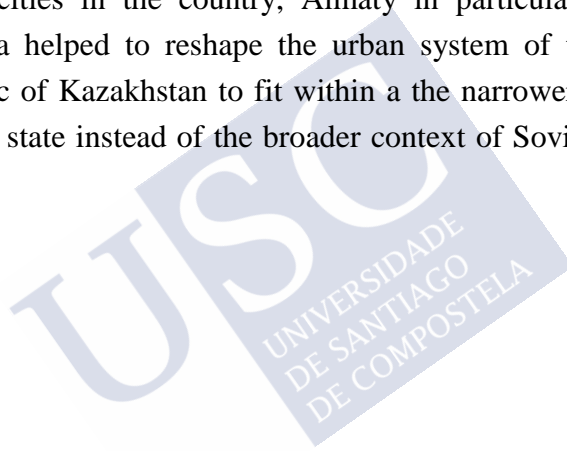
The creation and subsequent growth of the new capital city helped plug a hole in the urban system of the Republic by creating a second large metropolitan area in the country, with a strategically centered geographical location. While its status as capital guarantees the existence of local specialization in public administration, national and local policies are focused into converting Astana in a broader services hub, with projects like the creation of a financial centre with international projection. The rationale for this type of specialization is based on the necessity to adjust Kazakhstan's labour market to accommodate the surplus labour force coming out from monoindustrial cities, especially from those "mono-cities" where the companies that support the local economy are failing.

In this sense, the impact of Astana on the pattern and size of migration flows in Kazakhstan, both external and internal, is particularly relevant. The combination of policies directed to attract population to the new capital with others supporting the comeback of *oralman*, i.e., Kazakh returnees helped to create a ethnic-Kazakh majority in a part of the country where previously people of Russian origin were the dominant minority.

The new capital was granted the status of *special economic zone* or SEZ, which facilitated the quick development of large urban and architectural projects. This policy was reinforced with a conscious

(and expensive) branding effort, including the hosting of international events. All these measures were financed in a good part through Samruk-Kazyna.

The results obtained from the use of these were diverse on migration flows and on the urban system. I could not find conclusive evidence showing that the creation of the new capital increased the inflows of migrants or accelerated the migration from rural to urban environments, besides substituting the flows that otherwise would go to other large cities in the country, Almaty in particular. On the contrary, Astana helped to reshape the urban system of the newly formed Republic of Kazakhstan to fit within a the narrower limits of the independent state instead of the broader context of Soviet Central Asia.



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FINAL COMMENTS

The availability of natural resources, like oil and natural gas, should be valuable for a developing country. However, many resource-rich economies underperform. For this group of countries, the budget revenues are largely determined by the world market prices for the exported resources. And the price for these product categories is extremely volatile and can only be predicted with very low precision. Accordingly, the budget revenues in such countries tend to fluctuate significantly and, as a result, the price trend for commodities determines the situation and growth prospects of the national economies.

A successful use of non-renewable natural resources requires investment in assets that will be productive over time and with high social return, but these may be difficult to identify. Even if there is an effective use of revenues, resource revenues may alter the structure of the economy, displacing other tradable activities with impacts on the balance of payments (higher resource exports lead to higher imports and/or lower non-resource exports) and potentially also appreciating the real exchange rate (depending on elasticities). This situation is usually called the “Dutch disease”. As a result, the competitiveness of the economy is significantly reduced

To address the economic problems associated with the abundance of natural resources, the literature proposes several solutions. One way

to implement these solutions in practice has the state withdrawing by taxation a significant part of the windfall income provided by the favourable situation on the world resource markets, and accumulating it in special accounts or funds.

The role of these funds can be multiple. First, they may allow future generations to benefit from the sale of natural resources by present generations. Savings in favor of future generations require the creation of a financial reserve to ease the financial burden on the future generations. To this end, governments have to withdraw part of the economy windfall revenues due to high raw material prices, and store them. This is the so-called “saving for future generations” or “parking” function of funds. It should be noted that these funds can and do accumulate as financial resources not only income from the export of raw materials, but also budget surpluses. Second, the funds can be focused on short-and medium-term stabilization of fluctuations in income and expenditure of the state budget, and in helping the additional funding of public expenditure. This is called the “stabilizing” function for funds. Third and last, funds can act in way analogous to holding companies, in order to better place strategic public investments, usually related to reformist or industrial/development policies. The advantage of using these institutional structures is that they allow the introduction of professional decision-making about spending

The aim of this dissertation was to investigate one particular case of a SWF, i.e. the National Fund created to manage the revenues from oil extraction in the Republic of Kazakhstan. The National Fund of the Republic of Kazakhstan (NFRK) was created in the year 2000 as a mixed fund, following on the steps of Norway’s Pensions Fund (formerly known as the Oil Fund). The original design of the NFRK

proved itself too fragile, unable to perform adequately its savings and stabilization functions, and had to be modified two times in a short period of time, as transfers to public budgets were susceptible of political manipulation by the potential recipients.

All the obstacles in the workings of the NFRK stem from defects in its governance mechanisms. As I stated in Chapter 1, improvements in the design of the NFRK have to be based on two main axes: functional separation between its savings portfolio and its stabilization portfolio and increased transparency about the use of its assets. Transparency can be increased mainly in two ways. First, by publicly tracing the source and the use of the transfers from the Fund to the national and local budgets. Second, by publishing complete and unredacted reports about the Fund's activities in order to facilitate the transmission of information to the citizens and to increase public participation.

Kazakhstan's economy needs restructuring and diversification to cope with potential depletion of its natural resources. A SWF can be one alternative to finance these investments from windfall revenues coming from natural resources. Although industrial diversification is stated as one of the main objectives of all national industrial development plans or strategies, most projects started under them focused on the extractive industries. The global financial crisis started in 2007 helped to detour a significant part of the funds originally assigned to the creation of new industries towards supporting employment and bailing out the banking system. As a result, I could not detect, in Chapter 2, any significant positive effect of NFRK funding on any of the possible measures of the diversification targets during the 2010-2014 period: there were no increases in

manufacturing activity rates nor decreases in concentration measures of exports related with the size of NFRK investments.

The variable that seems to show a strong correlation with the evolution of the above mentioned indicators is the price of oil. With an average cost of oil extraction in Kazakhstan of \$50, we have found that the extrapolation of current trends, implying an average price of \$70 for the barrel of Brent oil and high volatility, pose an important downside risk to the ability of the Fund to dispose of significant volumes of assets to support industrial policy.

The project of relocating the capital of Kazakhstan from Almaty to Astana was financed partially with funds from the NFRK, as part of the development strategy of the Republic. This project is not merely symbolic. Instead, it is a significant measure of territorial planning policy involving both geopolitical and socioeconomic considerations.

The impact of Astana on the pattern and size of migration flows in Kazakhstan, both external and internal, is particularly relevant. The combination of policies directed to attract population to the new capital with others supporting the comeback of *oralman*, i.e., Kazakh returnees helped to create a ethnic-Kazakh majority in a part of the country where previously people of Russian origin were the dominant minority. All these measures were financed in a good part through Samruk-Kazyna.

The results obtained from the use of these were diverse on migration flows and on the urban system. I could not find conclusive evidence showing that the creation of the new capital increased the inflows of migrants or accelerated the migration from rural to urban environments.

To sum up, within the limitations of this dissertation, mainly the non-availability of enough data to be able to perform a quantitative impact analysis, I can assert that the defects in design and structure of the NFRK hinder its potential use to solve the natural resource curse, even if I could identify positive effects in some particular cases, like that of capital relocation. It will be necessary in the future to focus on the search of data and methods suitable for the counterfactual analysis of the NFRK impact.





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