

University of South Dakota

USD RED

Honors Thesis

Theses, Dissertations, and Student Projects

Spring 2018

The Role of Foreign Direct Investment in the Economic Development of Estonia

Stephan B. Weikert

University of South Dakota

Follow this and additional works at: <https://red.library.usd.edu/honors-thesis>

Recommended Citation

Weikert, Stephan B., "The Role of Foreign Direct Investment in the Economic Development of Estonia" (2018). *Honors Thesis*. 35.

<https://red.library.usd.edu/honors-thesis/35>

This Honors Thesis is brought to you for free and open access by the Theses, Dissertations, and Student Projects at USD RED. It has been accepted for inclusion in Honors Thesis by an authorized administrator of USD RED. For more information, please contact dloftus@usd.edu.

The Role of Foreign Direct Investment in the Economic Development of Estonia

A Report on Estonia's Post-Soviet Economic Transition

by

Stephan B. Weikert

A Thesis Submitted in Partial Fulfillment
Of the Requirements for the
University Honors Program

Department of Economics
The University of South Dakota
May 2018

The members of the Honors Thesis Committee appointed
to examine the thesis of Stephan Weikert
find it satisfactory and recommend that it be accepted.

Dr. David Carr
Associate Professor of Economics
Director of the Committee

Dr. Mike Allgrunn
Professor of Economics

Dr. Timothy Schorn
Associate Professor of Political Science

ABSTRACT

The Role of Foreign Direct Investment in the Economic Development of Estonia

Stephan Weikert

Director: David Carr, PhD

In the second half of the twentieth century, many countries were able to experience tremendous economic growth by allowing for an influx of foreign investment. One such country, and the focus of this paper, is the small Baltic nation of Estonia. Under Soviet control from 1940 to 1991, Estonia existed as a closed economy, with the little trade that did occur staying mainly within the Soviet Union. After gaining independence, Estonia took measures to open their economy with the chief of these measures being policies that encouraged investment from outside firms and nations. The country realized that with a population of just over a million people, the best way to spur economic growth was to allow for foreign investors to develop the country's capital stock. This investment allowed for Estonia to increase their presence in international markets, further aiding in their transition to a developed economy. In the period following their induction to the European Union when the greatest amount of foreign direct investment was received, to 2016, Estonia has had their real GDP per Capita rise from 47% of the European Union average to 73%, and the value of exports has risen from \$2.1 billion to \$13.9 billion. Foreign direct investment has played a central role in Estonia's development and the purpose of this paper is to report on the effects of foreign direct investment in Estonia from its post-Soviet transition to the modern day.

KEYWORDS: Estonia, Foreign Direct Investment, Economic Development

Table of Contents

Introduction.....	6
Political History.....	7
Estonia's Economic Transition.....	14
Estonia's Economy in the European Union.....	27
Conclusion.....	35

Table Appendix

Foreign Direct Investment in Estonia 1994-2003.....	23
Foreign Direct Investment in Estonia 2003-2016.....	32
Estonia Employment by Sector 1994-2003.....	24
Estonia Employment by Sector 2003-2017.....	33
Baltic Countries Comparison 1995-2016.....	37

CHAPTER ONE

Introduction

Foreign Direct Investment

Foreign Direct Investment (FDI) has been essential to many countries modernizing their economies in the second half of the twentieth century. Countries such as China and many former Soviet states were able to transition to developed economies much faster by allowing foreign capital to be invested into the countries' assets and enterprises. According to Dr. Jasminka Sohinger, a professor of Economics at Zagreb University and Cal Berkeley, "FDI represents a purchase of physical assets or business operations in a foreign country, to be managed by a cooperation...It is ownership of 10% or more of voting stock in the local company," (Sohinger 2005). Foreign direct investment has transformed the economic and political systems of many countries, paving the way for sustainable economic growth.

The Baltic nation of Estonia, is a prominent example of the impact foreign direct investment can have on a country. Following its independence from the Soviet Union in 1991, Estonia began taking steps to open its economy to incentivize trade and investment from outside firms. Estonia was much more aggressive in its seeking of FDI, and as such became the recipient of the most FDI per capita than any of the former Soviet republics. From the years 1991-1996, Estonia with a population of only 1.4 million people, attracted \$337 million in FDI whereas Latvia and Lithuania, countries with populations over 2 million attracted \$84 million and \$113 million in FDI respectively (Organisation for Economic Co-operation and Development 2018). Investment from foreign firms allowed

Estonia to completely transform its economy by building the stock of capital within the country, making services a larger part of the economy, and making the country more competitive in the global market. The purpose of this paper is to report on how Estonia utilized foreign direct investment as the cornerstone of its economy to transition from former Soviet state to developed economy, and the role of FDI to continue driving economic growth in the country today.



<http://estonianworld.com/wp-content/uploads/2016/03/Nordic-map.jpg>

CHAPTER TWO

Political History of Estonia

Beginnings through the Middle Ages

The first historical mention of Estonia was from a collection of Roman texts dated from the first century (Raun 2002). In these texts, the Roman Historian Tacitus describes the people who were living in the Baltic region. The country began as a collection of clans of Finnish-Ugric heritage building settlements along the Baltic Sea. Their societies were patriarchal in nature, with each settlement led by a council of elders (Tarmisto 2017). The largest and most important of these settlements was the now capital city of Tallinn which was established in the ninth century.

Estonia in the Middle Ages was the subject of many invasions. In the ninth century, the Vikings launched a large-scale expedition into Estonia but were repelled. The armies of Denmark and Sweden, to spread Christianity throughout Estonia, invaded in the eleventh and twelfth centuries respectively, although they were also repelled (Raun 2002). The Russians were also very active in their attempts to control Estonia as well. Between the years 1030c.e. to 1192c.e, thirteen invasions of Estonia were conducted by Russian forces, however, none succeeded in gaining any control of the region.

Estonia's status as independent land was challenged in the thirteenth century after a series of attacks by Germanic groups. A knighthood known as the Order of the Brothers of the Sword began their conquest of the Baltic by capturing the region of Livonia: modern day Latvia and Southern Estonia (Raun 2002). Through an Alliance with the King of Denmark, the rest of Estonia was conquered by the Order in 1219, with the

Danes given control of Northern Estonia. After a series of internal struggles, the Order was absorbed into the Teutonic Order who quickly seized control of Livonia and implemented their own laws and customs. A series of revolts from 1343-45 in Northern Estonia prompted the King of Denmark to sell Northern Estonia to the Teutonic Order (Tarmisto 2017). With the Teutonic Order having complete control of Estonia, Germanic influence would grow to dominate Estonian government, commerce, and religion for the next five centuries.

After the dissolution of the Teutonic Order in 1561, control of Estonia was split. Lithuania was granted the region of Livonia, while Sweden gained control of Northern Estonia in 1558. That same year marked the first successful Russian invasion of Estonia as the Muscovite Tsar, Ivan the Terrible captured the city of Narva (Tarmisto 2017). The Russians were expelled by the Swedes in 1581, and through the Treaty of Altmark in 1629, Sweden gained control of all of Estonia.

Industrialization through World War One

The Swedes would control Estonia until the Russians, led by Tsar Peter the Great, conquered the entire Baltic region during the Second Northern War. Russian influence led to the passing of many resolutions that gave rights to the peasant class. In 1804, Livonian peasants were given the right to private property and inheritance, and in 1816, the practice of serfdom was abolished in all of Estonia. Another resolution, passed in 1863 established the freedom of movement for peasants, and by the end of the nineteenth century, Estonian peasants held two-fifths of privately owned land (Raun 2002). Industrialization had begun in the region and this led to large increases in both population and education levels.



[https://upload.wikimedia.org/wikipedia/commons/thumb/b/b5/Medieval_Livonia_1260.s
vg/554px-Medieval_Livonia_1260.svg.png](https://upload.wikimedia.org/wikipedia/commons/thumb/b/b5/Medieval_Livonia_1260.svg/554px-Medieval_Livonia_1260.svg.png)

Over time, the Germanic influence over Estonian culture waned and was replaced by Russian norms and customs. Starting in 1882, Emperor Alexander III began the Russification of Estonia. Under this program, the Russian Municipal Constitution was introduced, and in 1887, Russian criminal and civil codes became the standard of law (Tarmisto 2017). Shortly thereafter, Russian replaced Estonian as the national language as Estonia was absorbed into the Russian Empire.

Despite being part of the Russian empire, Estonia tried multiple times to regain autonomy. During the First Russian Revolution of 1905, Estonia voted for resolutions demanding political sovereignty and they established a peasant congress in Tallinn. In response, Russia declared martial law in Tallinn, and many of the estates in the city were looted and burned. Under martial law, 328 Estonians were executed and many of the political leaders fled (Raun 2002). When the Second Russian Revolution erupted in 1917, Estonia was able to regain autonomy and establish a provincial government. Estonia broke away from the Russia on November 29, 1917, but by December 8th, the Russians had regained control of Tallinn.

In February of 1918, German forces entered Estonia and drove out the Russians from the region. Free from Russian control, the Estonian government declared themselves independent on February 24th. This independence was short lived, however; as the next day the German army invaded and conquered Tallinn, dissolving the Estonian government. Germany gained control of the entire Baltic region from Russia on March 3rd with the signing of the Treaty of Brest-Litovsk, and German rule lasted until Germany's surrender on November 11th, 1918 (Tarmisto 2017).

Estonia during Soviet Control

In the wake of Germany's surrender and withdrawal from the Baltic, Estonia declared independence once more. The Russian government deemed that the terms of the Treaty of Brest-Litovsk were null and void due to Germany's defeat, and they quickly launched an offensive into Estonia. The Russian army invaded Narva on November 28th, 1918. They were able to quickly capture the city and began mobilizing to attack Tallinn. In response, Estonia, aided by a British naval force and a contingent of Finnish volunteers, launched a counteroffensive. The move proved to be effective and by the end of February 1919, the Russians were driven out of Estonia.

With autonomy restored, Estonia set out to establish its own system of governance and procedure. On June 15th, 1920, Estonia adopted a constitution setting up a single chamber parliament. The organization of Estonia's sovereignty was not without interference however. Soviet conspirators attempted many times to undermine the Estonian government, culminating in a raid on December 1st, 1924 by over 300 Soviet conspirators (Raun 2002). They attempted to seize the official communications channels in Tallinn to call Soviet troops into the city, but they were repelled, and the raid failed. In response to the attempt, the Communist party was outlawed in Estonia. Throughout the rest of the 1920s, Estonia enjoyed modest economic growth, but this changed when The Great Depression occurred across the world. Estonia experienced high unemployment and falling agricultural prices because of the depression, however; the government did not have the power to respond due to terms in their constitution (Tarmisto 2017). Under the articles in the 1920 constitution, executive power was limited, and action was determined through parliament, however, no one party had a majority and as economic

problems grew the coalitions between parties fell apart and the government became deadlocked with no ability to correct itself. The government suffered from frequent political turnover, with ten different heads of parliament holding office from 1920-1933 (Estonian Institute 2018).

To address the problem of The Great Depression, Estonia adopted a new constitution in 1933 that expanded Presidential power. Prime Minister Konstantin Päts became acting President, and he quickly declared a state of emergency allowing him to assume dictatorial powers. Päts ruled Estonia, guiding the nation through The Great Depression until the Soviet Union took control of the country.

The encroachment of Soviet control began on September 28, 1939 when the Soviet Union forced Estonia to accept a treaty of mutual assistance. This treaty allowed for Soviet troops to enter the country and ceded control of several of Estonia's military bases to the Soviet Union. On June 16, 1940 the Soviet Union issued an ultimatum demanding that Estonia establish a new pro-soviet government, and the next day Soviet forces mobilized and occupied all of Estonia. The Soviet Union officially incorporated Estonia on August 6th, 1940, and within the first year of Soviet occupation, 60,000 Estonians were killed or deported (Raun 2002). During World War Two, Estonian militia units successfully pushed out the Soviet Union but were quickly conquered by Nazi Germany. The Soviet Union regained control of Estonia in September of 1944 and held control for the rest of the war.

After World War Two, the Soviet Union increased its direct influence in Estonia. The Soviet Union conducted mass deportations of native Estonians and facilitated waves of immigrants from Russia into the region. As a result, the indigenous population of

Estonia fell from roughly 90% of its total population before World War Two, to 60% of the total population in 1990 (Raun 2002). Along with the change in demographics, the Soviet Union also seized complete control of the governmental body in 1950, instituting pro-Soviet officials and removing all native Estonians from office.

Serious resistance to Soviet control began in 1988 when the Popular Front party emerged and passed a resolution to gain sovereignty through legislature. On March 30, 1990 the Estonian legislature declared themselves in a transitional phase to independence. Independence was declared in August of 1991 and was recognized by the Soviet Union in September. The last of the Russian troops left Estonia in 1994, and the country has enjoyed a stable democracy since.

CHAPTER THREE

Estonia's Economic Transition

The Shock Therapy Approach

After gaining independence from the Soviet Union, Estonia underwent a series of reforms to set up an independent economic infrastructure. The country decided to move to a market-based economy, but the decision to do so required a drastic change in Estonia's economic system. Estonia, along with the fellow Baltic nations of Latvia and Lithuania, engaged in a "shock therapy approach" to jumpstart the transition. A shock therapy approach, a term coined by economist Jeffery Sachs, is the introduction of a series of new market-oriented policies at one time rather than making the transition in small and gradual steps (Murrell 1993). The policies have four main goals: the ending of

price controls, the transition of state owned industries to the private sector, the ending of government subsidies, and tighter fiscal policy to reduce budget deficits and manage inflation. In the case of Estonia and the other Baltic countries, the shock-therapy approach relied on the government to move away from socialist principles and actively involve itself in the transition process to protect property rights and market development. Dr. Jack Reardon, a Professor of Economics at the University of Wisconsin-Stout, who focused his research on the economic transition of Estonia, Latvia, and Lithuania, stated in his 1993 paper “The Development of the Market System in the Baltic Republics” that, “A market system will develop in former socialist economies if: state property is privatized, prices are liberated, and government intervention is minimized, though it is realized that the market system is an institution that evolves over time, and the government must play an active role in nurturing the system’s development,” (Reardon 1993).

The policies put into effect by Estonia were designed to quickly allow Estonia to become competitive in the international marketplace. The first of these policies was the introduction of their currency, the Kroon, on June 20, 1992, (Brown 1993). The Kroon replaced the ruble as the national currency and was pegged to the German mark at a rate of eighty rubles equaling eight Kroon equaling one mark. (Hoag 1999). The introduction of the Kroon was the highest priority of Estonia in the transition process for both economic and societal purposes. The national currency provided a point of pride and national identity for the country, though it faced opposition from the International Monetary Fund and other members of the international community. There was fear from the community that Estonia would not be able to maintain the peg, and that it would be

better for the three Baltic States to develop a common currency. To alleviate these concerns, Estonia instituted a currency board insulated from political influence, an independent central bank, and a commitment to fiscal balance and a free market. A currency board is secure because in this system, domestic currency can be exchanged freely for the foreign currency, and the domestic money supply is set equal to the level of foreign reserves. Interest and inflation rates are tied to the rates of the foreign country, and the domestic country can experience stability in these rates. The ability to maintain the peg was aided by the backing of the Kroon to gold, and this was possible due to the returning of eight and a half million metric tons of gold to Estonia by the Bank of International Settlements (Brown 1993). Another policy put into place by Estonia during transition was the relaxing of price controls that had been in place before independence. According to Dr. William Brown from the University of Alaska Southeast, in his paper, "Economic Transition in Estonia," almost all the controls that had been in place were eliminated in a short time frame. Brown states, "By the beginning of 1992, less than ten percent of the consumer market basket (primarily sugar, bread, electricity, and rent) was subject to controls; prior to 1992, prices of most consumer goods were controlled," (Brown 1993). The third set of policies put into effect were policies that focused on fiscal accountability and privatization. The new constitution mandated that the Estonian government operated with a balanced budget, and steps were taken to sell of state-owned firms to private investors.

Once the policies were put into effect, Estonia experienced a tumultuous downturn in economic performance, though the downturn was expected by policymakers. According to Dr. Jack Reardon in his 1996 paper, "An Assessment of the Transition to a

Market Economy in the Baltic Republics”, Real Gross Domestic Product fell forty-five percent from 1990-1993 before it stabilized. Not all the decline was due to the shock therapy policies; however, as Reardon notes that close to half of the decline can be attributed to trade retaliation by the Soviet Union. By 1993, exports to Russia fell by close to eighty percent, to a value of \$182 million and represented thirteen percent of total exports (Brown 1993). The Soviet Union’s ending of trade with Estonia caused a loss of a key trading partner and the main supplier of raw materials for Estonia which exacerbated the impact the shock therapy policies had (Reardon 1996). Dr. John Hoag from the Bowling Green State University noted in his 1999 paper, “Estonia in Transition,” that industrial output fell sixty-three percent from 305 million Kroons in January 1992 to 114 million Kroons in January 1993 (Hoag 1999). While under Soviet Control, compared to the other newly-independent Baltic nations, Estonia’s path to privatization was much faster and simpler than that of Latvia or Lithuania. In Estonia at the time of independence, only twenty percent of firms were all-union enterprises compared to forty percent for both Latvia and Lithuania, and this smaller percentage of all-union firms aided in Estonia’s speed in transitioning to all privately-owned enterprises. By the end of 1994, eighty percent of the total number of enterprises were privately held including the telecoms sector, the national airline and the railway industry (Hoag 1999). There were some issues with privatization; however, as the large unprofitable enterprises were slow to privatize and the transfer of land into private hands also encountered some difficulty.

One major problem that arose from the implementation of the shock-therapy policies was inflation. The Kroon was deliberately undervalued by Estonia to allow their

exports to be more appealing in foreign markets, though it did lead to inflation by raising the price of imported goods. When the exchange rate was set at eighty rubles equaling eight Kroon equaling one mark, the actual exchange rate between rubles and the German mark was seventy rubles per mark meaning that the Kroon was undervalued by roughly fifteen percent (Brown 1993). The inflation experienced in Estonia was exacerbated further by the relaxation of price controls on consumer goods and subsidies in the energy sector. Subsidies in place due to Soviet control were eliminated following independence, and one of the most prominent subsidies eliminated was on gasoline. Before independence, Estonia imported gasoline at a price of four cents per gallon, but afterwards the price of gasoline now carried the world price (roughly one U.S. Dollar) in 1992 (Brown 1993). The source of this inflation was due to cost-push effects taking place. Demand for goods and services, such as gasoline, remained relatively constant, but when price controls were eliminated, the increase in input prices resulted in the prices of all related goods and services to rise as well. Inflation was especially high during the first few years of independence from 1991-1993 as total prices rose 525% in 1991 and by close to a 1000% in 1992. Prices for consumer goods were affected by even higher levels of inflation. Dr. Brown stated, "Between January 1991 and January 1992, consumer prices rose 629%; the rise between February 1991 and February 1992 was 1015%; and the March to March rate was 1169%," (Brown 1993). Inflation was so severe due to the immediate end of Soviet Era policies, but the inflation was a necessary part of the transition to a market economy as privatization and the removal of government price controls, necessary aspects of transition, caused the prices to rise to levels close to the world price. Due to the policy changes being implemented all at once, the inflationary

problems only persisted for a few years, as the economy rapidly adjusted to market prices. By 1998, inflation had stabilized at ten percent per year and remained in that range until Estonia joined the European Union in 2004.

Foreign Direct Investment in Transition

A central part of Estonia's economic transition was the adoption of policy and ideology to make the country more open to international trade. With a population of just over one million, operating as a closed economy would have greatly limited Estonia's ability to have sustained economic growth. During Soviet occupation, the dominant industry was that of manufacturing and this was the case for the first few years in transition. In 1989, manufacturing represented 35.1 percent of total gross domestic product, and by 1994 the percentage had fallen to 16.6 but it remained the largest individual component of Estonia's economy. Salvaging leftover Soviet materials was another integral part of Estonia's early transition economy and was Estonia's first major foray into international markets. The major export of Estonia during 1991 to 1993 was scrap metal, mainly recovered from abandoned Soviet military bases, and it was the sixth largest exporter of scrap metal in the world (Brown 1993). This position did not last long as by 1995, Estonian scrap metal exports represented only \$34.2 million and 0.39% of the global total (Observatory of Economic Complexity). The economy over time, transitioned to be more service-based and by 1999, wholesale and retail trade, transportation, and real estate activities constituted three of the largest sectors of the Estonian economy at 14.5, 13.2, and 11.0 percent of gross domestic product respectively (Estonia Institute).

Compared to the other Baltic republics that gained independence at the same time, Estonia fared much better in attracting foreign investment. The chief reason behind this

was the adoption of policies that greatly incentivized foreign firms to move into the country. Estonia sought out foreign investment because doing so would help develop the nation's capital stock boosting productivity and gross domestic product growth. To incentivize foreign investment, Estonia granted firms that invested in the country a two-year grace period before paying taxes. In addition to the grace period, taxes in the third year and onward were relatively low (Brown 1993). Most of the foreign direct investment in early part of the transition was by former Estonian nationals who had fled from Soviet control, and their investments were predominantly in small businesses.

Apart from the tax holiday, another policy choice made by Estonia that made it an attractive target for foreign direct investment was the decision to not issue privatization vouchers. The other Baltic republics, Latvia and Lithuania, instituted a voucher system that would allow for only a select number of outside firms to invest in the country. By not having a voucher system, Estonia became a much more appealing choice for outside firms to invest. With a highly educated work force and low wages compared to the rest of Europe, due partly to the undervaluation of the Kroon, Estonia stood apart from its fellow Baltic nations as a country for foreign firms to enter and operate.

The results of Estonia's decision to greatly incentivize foreign investment paid tremendous dividends throughout the transition period and into the mid-1990s. Dr. Reardon states that, "Estonia, despite having the lowest population, has attracted more foreign investment than Latvia or Lithuania: \$317 million and 7,612 companies compared to \$84 million and 3,522 companies for Latvia and \$113 million and 4,018 companies for Lithuania," (Reardon 1996). Examining the demographics of the Baltic nations further shows the level of magnitude foreign direct investment had on the Estonian economy. In

the mid-1990s, Estonia had a population of 1.4 million whereas Latvia and Lithuania had populations of 2.3 and 3.6 million (OCED 2018). Foreign direct investment was much more concentrated in Estonia than the rest of the Baltic in both absolute and per capita terms, and this was due to their specific choices in policy to attract investment.

Estonia's ability to transition from socialist state to market economy was greatly aided by the policies and measures taken to encourage foreign direct investment into Estonia. By making itself an attractive target for foreign investors, Estonia was able to privatize quicker and move from being manufacturing centered to being service industry centered in nature. Foreign direct investment aided in Estonia's recovery following the shock therapy policies, and the building up of the countries capital stock would be of great help as the nation moved out of the transitory phase.

Foreign Direct Investment in Estonia 1995-2003

The period between the early stages of economic transition and attaining membership into the European Union is one marked by continuous strides to further open Estonia's economy. The rate of inflation had stabilized at roughly ten percent per year, and the peg to the German mark had been maintained without a major currency crisis. The accumulation of capital stock and improved technology had led to gains in productivity and real gross domestic product growth which increased the standard of living for Estonian citizens. International trade became a central part of the Estonian economy with imports and exports of goods and services accounting for ninety-five percent of gross domestic product in 2000 (Kalcheva 2003). Estonia's high degree of openness allowed it to establish itself in the international marketplace, and this was made possible through the foreign direct investment in the country.

Foreign direct investment had a profound effect on Estonia, and the influx of capital development allowed Estonia to start bridging the gap between itself and the fully-developed countries of the European Union. Throughout the 1990s into the early 2000s, foreign direct investment became a significant component of the world economy. By the year 2002, the stock of inward foreign direct investment was over twenty-two percent of the world's Gross Domestic Product, and according to Dr. Jasminka Sohinger from in her article, "Growth and Convergence in European Transition Economies: The Impact of Foreign Direct Investment," there was a, "Rising presence of inward FDI in transition economies' production. In the period from 1990 to 2002, it rose from 1.3 to 20.8 percent of (real) GDP," (Sohinger 2005). Estonia, saw a boon in the levels of inward FDI during this period. Adjusted to 2008 prices, Estonia in 1995 had a total FDI stock of 540 million Euros representing 20.5 percent of gross domestic product. By 2000, the stock had increased to 3,572 million Euros which represented 60.3 percent of gross domestic product (Worldbank 2008). Foreign direct investment in Estonia was able to alleviate the largest problem the country had in privatization, the converting of the unprofitable state-run firms, that were also the largest employers, into privately held firms. Dr. Sohinger states, "Foreign acquisitions of domestic, mainly state-owned firms in transition economies, as well as opening utilities to FDI privatization, brought foreign capital mainly into the service sectors, such as trade and financial intermediation," (Sohinger 2005). The increased influx of foreign direct investment allowed Estonia to have a higher Gross Domestic Product growth rate than the European Union average and start to bridge the gap in economic performance.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Economic activities total (Thousands of People)	675.4	633.4	619.3	617.2	606.5	579.3	585.3	589.6	589.9	602.9
Agriculture, forestry and fishing	92.5	65.2	61	58.1	54.7	46.8	39.2	38.9	40.4	37.4
Mining and quarrying	10.5	10	9.5	7.1	7.6	8	7.9	5.8	5.8	5.4
Manufacturing	143.9	157.4	147.7	133.7	130.1	122.8	130.2	131.7	127.9	132
Electricity, gas, steam and air conditioning supply	13.7	11.6	11.8	13.3	13.4	12.6	10.7	7.9	7	8
Water supply; sewerage, waste management and remediation activities	2.9	3.4	3.6	4.5	3.9	4	4.3	3.6	3.1	4.7
Construction	49.7	35.3	36.3	46.5	46	40.7	40.1	39.1	39.5	44.5
Wholesale and retail trade; repair of motor vehicles and motorcycles	84.6	79.2	81.5	84.2	83.2	78.8	79	87.4	86.3	81.8
Transportation and storage	52.7	57.8	56.1	51.2	50.4	54.7	51.9	51.2	53.6	53.7
Accommodation and food service activities	18.2	16.8	16.8	14.3	14	13.4	20.2	17.1	18	18
Information and communication	9.2	10.9	11.4	12	10.7	9.7	13.7	13.7	12.3	11
Financial and insurance activities	8	7	6.5	7.5	8.3	8.5	8.2	7.6	8.3	7.8
Real estate activities	8.3	11.2	10.8	9.2	11.2	11	11.5	11.3	13.8	11.6
Professional, scientific and technical activities	14.1	13.9	13.4	16	16.1	16	18.3	13.2	10.1	15.7
Administrative and support service activities	9	7.3	8.2	8.8	9.5	11.1	11.9	13.9	14.6	14.2
Public administration and defence, compulsory social security	34.2	33.9	33	34.1	35.9	35.3	36.3	36.9	34.5	37
Education	60.4	55	54.8	57.7	55	51.4	48.2	52.7	56.9	56.7
Human health and social work activities	33.9	34.3	33.8	35.1	33.1	30.1	28.9	31.4	31.9	37.4
Arts, entertainment and recreation	14.1	15.7	14.8	14.8	14.1	14.8	14.4	16.4	16.3	16.7
Other activities	15.4	7.4	8.2	9.2	9.3	9.5	10.4	9.8	9.6	9.3
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Economic activities total (Percentage of Total)	100	100	100	100	100	100	100	100	100	100
Agriculture, forestry and fishing	13.7	10.3	9.9	9.4	9	8.1	6.7	6.6	6.9	6.2
Mining and quarrying	1.6	1.6	1.5	1.1	1.2	1.4	1.3	1	1	0.9
Manufacturing	21.3	24.9	23.9	21.7	21.5	21.2	22.3	22.3	21.7	21.9
Electricity, gas, steam and air conditioning supply	2	1.8	1.9	2.2	2.2	2.2	1.8	1.3	1.2	1.3
Water supply; sewerage, waste management and remediation activities	0.4	0.5	0.6	0.7	0.6	0.7	0.7	0.6	0.5	0.8
Construction	7.4	5.6	5.9	7.5	7.6	7	6.9	6.6	6.7	7.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	12.5	12.5	13.2	13.6	13.7	13.6	13.5	14.8	14.6	13.6
Transportation and storage	7.8	9.1	9.1	8.3	8.3	9.4	8.9	8.7	9.1	8.9
Accommodation and food service activities	2.7	2.6	2.7	2.3	2.3	2.3	3.4	2.9	3.1	3
Information and communication	1.4	1.7	1.8	1.9	1.8	1.7	2.3	2.3	2.1	1.8
Financial and insurance activities	1.2	1.1	1.1	1.2	1.4	1.5	1.4	1.3	1.4	1.3
Real estate activities	1.2	1.8	1.7	1.5	1.9	1.9	2	1.9	2.3	1.9
Professional, scientific and technical activities	2.1	2.2	2.2	2.6	2.7	2.8	3.1	2.2	1.7	2.6
Administrative and support service activities	1.3	1.2	1.3	1.4	1.6	1.9	2	2.4	2.5	2.4
Public administration and defence, compulsory social security	5.1	5.4	5.3	5.5	5.9	6.1	6.2	6.3	5.8	6.1
Education	8.9	8.7	8.9	9.4	9.1	8.9	8.2	8.9	9.6	9.4
Human health and social work activities	5	5.4	5.5	5.7	5.5	5.2	4.9	5.3	5.4	6.2
Arts, entertainment and recreation	2.1	2.5	2.4	2.4	2.3	2.5	2.5	2.8	2.8	2.8
Other activities	2.3	1.2	1.3	1.5	1.5	1.6	1.8	1.7	1.6	1.5

The most prominent example of foreign direct investment revolutionizing Estonia's economy is the surge in investment in the financial sector during the final years of the 1990s. From the years 1994-1997, Estonia received an average of 170 million Euros of inward direct investment with the manufacturing sector receiving the highest share of this investment. In 1998, this pattern would change when the Swedish based company, Swedbank, began acquiring assets in Estonia to prepare for beginning operations in 2000. Foreign direct investment into Estonia surged to over 500 million Euros, and the financial sector received a majority of the inflow with over 290 million Euros invested into this sector. Swedbank was able to position itself as the largest bank in Estonia and become of the country's major employers. From the early 2000s and onward, investment into manufacturing was still strong; however, services became the major driver of the Estonian economy.

One consequence of attracting a substantial amount of foreign direct investment from Western Europe, was a strong amount of integration with the economies of the European Union. Estonia depended on the European Union both as a market for Estonian goods and services, and as a means of driving internal development in Estonia. To foster this reliance, Estonia took multiple measures to integrate itself further with the European Union. Estonia joined the World Trade Organization in 1999, and agricultural tariffs that were in place for countries that Estonia did not have a free-trade agreement with were reduced to rates below the level the World Trade Organization agreed upon.

To measure the impact of increased integration of Estonia with the European Union, researchers from the University of Pretoria analyzed how foreign direct investment influenced the economic growth of Estonia. Using data from the Bank of

Estonia, the researchers found that foreign direct investment provided a means to finance Estonia's current account deficit which would sustain the path of Estonia's growth. Two main effects of foreign direct investment were also found, "A direct effect on GDP, as FDI increases, it also induces an increase in investment, which will affect GDP directly through a demand effect and indirectly through its effect on productivity. An effect on inflation: as GDP increases there is an inflation pressure that is partly compensated by an increase in potential output," (Basdevant 2003). Foreign direct investment operates in a positive cycle, if inflation is contained, foreign direct investment can foster growth which in turn attracts more investment in the future.

The effect of integration can further be quantified by comparing the difference between Estonia and a version of the country that had not opened itself up to trade and investment. In the article, "Comparative Advantage and the Welfare Impact of European Integration," Dr. Andrei Levchenko from the University of Michigan, constructed a model of seventy-nine countries to analyze the gains from trade, the increase in consumer and producer surplus, for a country that had opened itself up to trade. Dr. Levchenko found that the more different from each other two countries were when trading began, the more those countries would gain from trade. In his analysis, he found that through integration with the countries of Western Europe, Estonia had a welfare gains from trade of close to twenty percent, over two times the Eastern European average of nine percent. The reason behind Estonia's much larger welfare gain was due to its technological makeup. Dr. Levchenko states, "Controlling for country size and average trade costs, East European countries that are similar in relative technology to Western Europe tend to gain less. The most technologically different countries -Estonia – gain the most," (Levchenko

2012). Due to differences in technology and economic factors, Estonia was able to benefit greatly from integration with Western Europe, which would culminate in its decision to join the European Union in 2004.

In the period after the early integration years of 1990 to 1993, Estonia took many measures to increase the attractiveness of the country to be the recipient of foreign direct investment. Estonia transitioned from being a manufacturing-based economy to one more focused on providing services. The influx of investment in the financial sector propelled this shift even further, and as more of the larger firms became privatized, Estonia became more reliant on the member countries of the European Union. Integration with Western Europe provided a more promising environment to achieve greater economic conditions, and Estonia saw higher levels of Gross Domestic Product and productivity growth as it began to climb closer to the European average.

CHAPTER 4

Estonia's Economy in the European Union

Beginnings in the European Union

In September of 2003, after months of debate, Estonia voted to join the European Union with a count of sixty-seven percent of votes in favor for membership. Estonia officially joined the European Union on May 1, 2004. The decision to join the European Union would quickly pay dividends into furthering Estonia's economic development and integration. In 2005, the first full year of membership, Estonia saw an influx in foreign direct investment significantly greater than investment seen in the pre-European Union

period. The total level of foreign direct investment topped 2.25 billion Euros nearly triple the 771 million Euros invested the year before. Much of the investment was in the financial sector, 1.8 billion Euros in 2005 compared to 215 million in 2004, as multiple banking and insurance services firms moved into the country. The manufacturing sector saw a modest boost in investment along with the construction and energy industries. Foreign direct investment decreased during the following years, but the level of investment was still higher than the pre-European Union era.

With the surge in foreign direct investment, Estonia continued to experience levels of growth greater than if it had remained a closed economy. The investment allowed the country to further develop its capital stock and increase productivity. To quantify the performance of Estonia's economy, Dr. Barbara Dobeli, from the Swiss National Bank, constructed a model comparing the countries that, along with Estonia, joined the European Union in 2004. Dr. Dobeli looked at the changes in real income rather than gross domestic product growth because she contends that real GDP indexes can be misleading by treating terms-of-trade (the ratio of export prices to import prices) changes as price effects instead of a real effect. Dr. Dobeli states, "A country that improves its terms of trade...results (in) stronger purchasing power abroad, the country can import more for what it exports, constituting a real effect," (Dobeli 2007). In the case of Estonia, the country saw a 0.8 percentage point difference between its post and pre-European Union membership real income growth rate due to its terms of trade gains. This 0.8 percentage point increase was one of the highest of the eight new European Union countries, second to Lithuania.

The impact of terms-of-trade improvements on real income was significant, but the key driver of real income growth was the increases in productivity brought on from foreign direct investment. Dr. Dobeli concludes in her study that Estonia had the highest contribution of productivity to growth. In Estonia, gains in productivity were found to add an average of 3.8 percent to real gross domestic product growth. An increase in trade was able to help Estonia grow throughout the mid-2000s after attaining European Union membership, but as Dr. Dobeli states, “the strongest contribution to real income growth does not stem from terms-of-trade movements, but from either productivity gains or an increase in capital,” (Dobeli 2007). Foreign direct investment enabled Estonia to cultivate its capital stock, bringing gains in income, welfare, and productivity to the country.

The early years of Estonia in the European Union are marked with a significant increase in foreign direct investment leading to productivity and terms-of-trade increases. The adoption of the Euro in 2011 brought stability to a country that had previous difficulty with controlling inflation. Further integration with Western Europe provided a deeper market for Estonian goods and services, and this allowed Estonia to continue becoming more developed as a modern economy.

Foreign Direct Investment in the 2010s

The Estonian economy has continued to focus on promoting foreign investment into the country to be more competitive in the international market. According to Estonia’s Ministry of Economic Affairs and Communications website, “exports contributed approximately 90% of Estonia’s GDP and the volume of imports and services, used for production, investments or consumption, was largely the same,” (Estonia Ministry of Economic Affairs). Estonia is deeply integrated with the European

market, and Estonia has placed the path for current and future growth in the hands of entrepreneurs backed by foreign investment. Current development in Estonia is based on policies pursuing five key factors: “1) Education of the labour force must better match the requirement of entrepreneurs, 2) exports must be increased, 3) knowledge-based entrepreneurship must increase, 4) internationalism must be enhanced and foreign investments are to be involved for that purpose, 5) Establishment of a favourable climate for... start up enterprises,” (Estonia Ministry of Economic Affairs). The role of foreign direct investment has transitioned from mainly cultivating the capital stock of Estonia, to now empowering Estonian entrepreneurs to create sustainable economic growth.

Through pursuing this method of economic development, Estonia has made measurable strides to closing the gap between itself and the rest of the European Union. In 2001, the purchasing power adjusted GDP per capita was only forty-seven percent of the European Union average. By 2013, this percentage had increased to seventy-three percent with the goal being to reach eighty percent of the European Union average by 2020, (Estonia Ministry of Economic Affairs). Estonia has been able to capitalize on the advantages afforded to them through foreign direct investment and has experienced higher levels of growth to catch up with the rest of the European Union. To achieve this continued growth, the government has focused on making it easier for entrepreneurs to attain foreign capital. The process for attaining building permits for investors was simplified, and the protection offered to foreign investors was expanded to be more encompassing. As a result, there are over 60,000 companies operating within Estonia with many of these firms being partly or wholly financed with foreign investments,

(Estonia Ministry of Economic Affairs). Stimulating investment has continued to pay dividends for Estonia and has enabled it to enjoy a sustainable level of economic growth.

Through the 2010s, Estonia has proven to continue being an attractive destination for foreign direct investment. In a 2014 investment climate report by the United States' Department of State, the report concluded that Estonia was one of the safest countries for foreign investors and was a leading country in FDI per capita inflows. The report states that in 2013, "Estonia attracted in total 20.7 billion USD of investment, 24% was made into the financial sector, 16% into manufacturing, another 16% into real estate activities, 13% into wholesale and retail trade," (U.S. Department of State 2014). Levels of foreign investment have continued to trend upwards following Estonia's entry into the European Union, and Estonia has taken measures to ensure investment maintains its integral role in Estonia's economy.

	2003	2004	2005	2006	2007	2008	2009
Total Direct investment into Estonia (Millions of Euros)	822.2	770.8	2250.9	1063.7	1688.7	1249.1	1324.1
Agriculture, forestry and fishery	7.1	-0.9	13.5	16.6	16.9	8.9	-8.1
Mining and quarrying	5.4	4.7	4.3	7.5	6.7	1.7	2.4
Manufacturing	103.8	174.5	196.6	254	163	9.1	33.3
Electricity, gas, steam and air conditioning supply	5.2	-7.5	46	24.1	-11	37.4	67.3
Water supply; sewerage, waste management and remediation activities	0.9	5.1	-30.2	11.6	8	9.5	-2.1
Construction	30	8.4	38.1	23.4	36.4	-60.8	-28.3
Wholesale and retail trade; repair of motor vehicles and motorcycles	291.5	145.7	55.3	27.6	354.1	45.8	12.6
Transport and storage	36.4	21.9	15.4	96.1	12.9	149.4	89.7
Accommodation and food service activities	16.9	5.3	-7.4	-7.1	-14.9	66.5	-9.1
Information and communication	29.8	-6.8	-18.9	18.1	-42.7	47.4	67.3
Financial and insurance activities	126.9	214.6	1802.8	526.2	916.7	959	750.7
Real estate activities	110.1	180	148.5	30.6	171.2	-1.8	64.1
Professional, scientific and technical activities	18.1	-12.4	7.2	8	23.3	-44.5	269.9
Administrative and support service activities	31.2	25.8	-33.5	7.5	41.9	28	21
Not classified	4.3	6.2	7.9	2.7	8.5	0.1	-0.2
	2010	2011	2012	2013	2014	2015	2016
Total Direct investment into Estonia (Millions of Euros)	1139	722.7	1218	579.1	493.5	11.7	827.2
Agriculture, forestry and fishery	23	42.5	139.3	29.2	9.4	22.8	24.6
Mining and quarrying	9.1	14.2	0.2	-1.1	15	-3	-3.7
Manufacturing	99	412	61.7	-101.7	-91.8	150.5	158.1
Electricity, gas, steam and air conditioning supply	61.2	11.4	-16.8	2.1	-58	-46.5	-23.7
Water supply; sewerage, waste management and remediation activities	8	12.7	-3	-9.2	3.9	-10.2	-2
Construction	-5.2	5.5	7.5	2.9	-4.8	15.6	26.2
Wholesale and retail trade; repair of motor vehicles and motorcycles	106.9	-11.8	248.4	283.1	293.3	170.9	121.2
Transport and storage	101.3	119.9	179.2	-10.8	30.3	22.5	1.3
Accommodation and food service activities	-10.1	9.2	8.9	1.1	8.8	1.1	7.1
Information and communication	-173.4	16.2	69	-110.7	39.8	15.4	66.3
Financial and insurance activities	795	-193.5	642.7	432.2	412.8	-392.1	353.8
Real estate activities	135.1	194.8	-21	88.3	79.9	22.9	9.7
Professional, scientific and technical activities	-37.1	136	-197.9	-6.1	-303.1	-31.9	-2.7
Administrative and support service activities	28.4	-50.8	91.2	-28.5	50.5	64.1	91.1
Not classified	0.4	0	0	2.6	0.3	0	0

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Economic activities total (Thousands of People)	602.9	601.9	615.6	651.7	657.6	656	593.9	568	603.2	614.9	621.3	624.8	640.9	644.6	658.6
Agriculture, forestry and fishing	37.4	35.3	31	31.9	30.8	25.5	24	23.9	26.6	27.6	26.5	24.1	25	25	23.1
Mining and quarrying	5.4	7.9	6.5	5.3	5.5	5.9	6.3	6.7	5.8	4.9	4.8	4.2	3.1	3.3	4.1
Manufacturing	132	135.6	137.1	133.4	130.8	133.9	112.2	106.6	119.1	115.5	116.4	114	120.6	120.7	124.9
Electricity, gas, steam and air conditioning supply	8	9.1	10.2	11.5	8.8	8.1	7.5	8.6	8.1	9.2	7.1	8.1	7.6	6.3	7.4
Water supply; sewerage, waste management and remediation activities	4.7	5	4	2	2.3	2.4	2.3	2.3	3.7	3.3	3	3.1	3	3	3.3
Construction	44.5	47	50	64.8	82.6	80.6	58.1	47.7	58.9	58.2	56.6	58.7	61.8	57.9	57
Wholesale and retail trade; repair of motor vehicles and motorcycles	81.8	79.6	79.2	88.1	87	92.4	83	80	81.1	79.1	81.1	81.2	83.9	83.7	87.5
Transportation and storage	53.7	45.9	51.1	57.7	54.3	51.1	50.6	44.4	48.3	51	46.9	50.8	46.7	50.8	52.4
Accommodation and food service activities	18	16.3	21.3	22	22	23	19.3	18.9	18.4	18.8	23.4	25.8	26.1	26.5	25.5
Information and communication	11	13.9	15.6	15.1	13.7	15.6	14.7	12.7	16.7	18.5	19.7	22.1	26.3	28.3	31.1
Financial and insurance activities	7.8	8	6.4	7.5	9.5	10.5	11.4	9.4	10.3	10.9	10.2	8.2	9.5	11	12
Real estate activities	11.6	10.1	10	10.1	9.8	10.3	9.1	10.1	10.7	10.7	11.7	11.5	10.3	11.8	10.3
Professional, scientific and technical activities	15.7	14.5	16	17.5	17.9	21	21	21	23.1	23.2	26.2	26.7	25.5	24.7	29.3
Administrative and support service activities	14.2	13.8	17.5	16.1	18.2	17.2	17.1	19.1	17.4	21.3	22.7	18.8	18.6	21.3	23.5
Public administration and defence, compulsory social security	37	39.6	39.2	40.2	38.9	38.2	37.1	40.3	39.3	40.1	43	45.1	42.4	39.7	38.7
Education	56.7	54.9	56	58.9	54.7	59.7	61.9	55.7	56.5	61.8	56.1	55	60.6	57.6	56.8
Human health and social work activities	37.4	39.2	34.9	36.6	36.1	30.8	32.9	34.2	34.6	34.5	36.4	38.6	39.1	39.4	37.8
Arts, entertainment and recreation	16.7	15.8	16	18.6	17.8	15.1	14.1	14.6	14.2	14.9	17.1	16.6	14.2	17.5	17
Other activities	9.3	10.4	13.5	14.4	16.8	14.7	11.3	11.7	10.5	11.4	12.4	12.3	16.7	16.1	16.9
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Economic activities total (Percentage of Total)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Agriculture, forestry and fishing	6.2	5.9	5	4.9	4.7	3.9	4	4.2	4.4	4.5	4.3	3.9	3.9	3.9	3.5
Mining and quarrying	0.9	1.3	1.1	0.8	0.8	0.9	1.1	1.2	1	0.8	0.8	0.7	0.5	0.5	0.6
Manufacturing	21.9	22.5	22.3	20.5	19.9	20.4	18.9	18.8	19.7	18.8	18.7	18.2	18.8	18.7	19
Electricity, gas, steam and air conditioning supply	1.3	1.5	1.7	1.8	1.3	1.2	1.3	1.5	1.3	1.5	1.1	1.3	1.2	1	1.1
Water supply; sewerage, waste management and remediation activities	0.8	0.8	0.6	0.3	0.3	0.4	0.4	0.4	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Construction	7.4	7.8	8.1	9.9	12.6	12.3	9.8	8.4	9.8	9.5	9.1	9.4	9.6	9	8.7
Wholesale and retail trade; repair of motor vehicles and motorcycles	13.6	13.2	12.9	13.5	13.2	14.1	14	14.1	13.4	12.9	13	13	13.1	13	13.3
Transportation and storage	8.9	7.6	8.3	8.9	8.3	7.8	8.5	7.8	8	8.3	7.6	8.1	7.3	7.9	8
Accommodation and food service activities	3	2.7	3.5	3.4	3.4	3.5	3.3	3.3	3	3.1	3.8	4.1	4.1	4.1	3.9
Information and communication	1.8	2.3	2.5	2.3	2.1	2.4	2.5	2.2	2.8	3	3.2	3.5	4.1	4.4	4.7
Financial and insurance activities	1.3	1.3	1	1.1	1.4	1.6	1.9	1.7	1.7	1.8	1.6	1.3	1.5	1.7	1.8
Real estate activities	1.9	1.7	1.6	1.5	1.5	1.6	1.5	1.8	1.8	1.7	1.9	1.8	1.6	1.8	1.6
Professional, scientific and technical activities	2.6	2.4	2.6	2.7	2.7	3.2	3.5	3.7	3.8	3.8	4.2	4.3	4	3.8	4.4
Administrative and support service activities	2.4	2.3	2.8	2.5	2.8	2.6	2.9	3.4	2.9	3.5	3.7	3	2.9	3.3	3.6
Public administration and defence, compulsory social security	6.1	6.6	6.4	6.2	5.9	5.8	6.2	7.1	6.5	6.5	6.9	7.2	6.6	6.2	5.9
Education	9.4	9.1	9.1	9	8.3	9.1	10.4	9.8	9.4	10.1	9	8.8	9.5	8.9	8.6
Human health and social work activities	6.2	6.5	5.7	5.6	5.5	4.7	5.5	6	5.7	5.6	5.9	6.2	6.1	6.1	5.7
Arts, entertainment and recreation	2.8	2.6	2.6	2.8	2.7	2.3	2.4	2.6	2.4	2.4	2.7	2.7	2.2	2.7	2.6
Other activities	1.5	1.7	2.2	2.2	2.6	2.2	1.9	2.1	1.7	1.9	2	2	2.6	2.5	2.6

The role of foreign direct investment is integral to Estonia's economic stability and as such the economic system has been designed to attract export-oriented companies. Estonia has created one of the simplest tax systems in the world with a flat rate of twenty-one percent. In addition, only profits distributed as dividends or other forms of payout are subjected to being taxed. Profits kept as retained earnings or used in reinvestment are exempt from income taxes, (U.S. Department of State 2014). The legal structure of Estonia has also been constructive to appeal to foreign investors. Both foreign and domestic investors have the same legal footing regarding property rights, incentives, and performance standards. The U.S. Department of State reports, "No special investment incentives are available to foreign investors, nor is any favored treatment accorded them. Similarly, there is no specific performance requirements...that differ from those required of domestic investments," (U.S. Department of State 2014). Foreign firms can enter almost any sector freely, but some sectors, predominantly the energy, transport, and mining sectors, require specific licenses granted by the Estonian government. In these sectors, licenses are granted after a review for anti-competition problems, and the Department of State found that this process was fair and non-discriminatory in nature. Estonia has strived to be transparent, fair, and welcoming to foreign investors, and this has created an environment where FDI has been plentiful and the companies brought into the country have been able to increase the level of exports of Estonia, creating further economic growth and sustaining development.

The focus of Estonia's economic strategy has been to create conditions favorable to promoting foreign direct investment. The decade following entry into the European Union saw the role of FDI shift to encompassing the empowerment of entrepreneurs to

produce sustainable economic growth. Estonia has been able to become more active in the international markets, with exports creating the bulk of value within the country. By utilizing foreign markets for both investment and trade, Estonia has been able to reduce the gap between itself and other developed countries and has laid the foundation to be able to continue doing so.

CHAPTER 5

Conclusion

Comparison to the Other Baltic Nations

The Baltic nations of Estonia, Latvia, and Lithuania have often been grouped together due to their cultural similarities and similar circumstances both before and after Soviet occupation. All three regained independence from the Soviet Union around the same time, and each country approached the challenge of how to adjust to entering the world economy in its own unique way. The proceeding table charts the economic statistics of the Baltic nations from 1995-2016 by providing data from three years during the period. The three years are: 1995, a year towards the transitory period for the three countries; 2005, the first full year of European Union membership for each country, and 2016, the most recent year with available data.

In 1995, Estonia, Latvia, and Lithuania were completing their transitions to market-based economies. Estonia had the lowest population and gross domestic products of the three nations, at 1.5 million people and \$9.027 billion respectively, but Estonia had the highest gross domestic product per capita at \$6,234. Estonia also attracted the largest

amount of foreign direct invest at this time. The FDI inflow for Estonia in 1995 was \$147 million, whereas for Latvia and Lithuania, the value for FDI inflows were substantially lower. No annual statistics for inward FDI was available for Latvia and Lithuania are publicly available, but the yearly average of inward FDI for the period of 1991-1996 for Latvia and Lithuania are \$14 million and \$18.5 million.

From the period of transition to European Union membership, all three countries had experienced considerable levels of economic growth. The population of all three countries declined, but the real gross domestic product of each country more than doubled. Gross domestic product per capita remained the highest in Estonia at a value of \$16,466, and all three countries experienced highs in FDI inflows. Estonia received over \$2 billion in foreign direct investment in 2005, while Latvia received \$1.6 billion and Lithuania received \$845 million in inward FDI.

The final year of comparison, 2016, is marked by continual economic improvement by all three countries. The gross domestic product for each country increased substantially, and the GDP per capita for Estonia and Lithuania are within \$130 of each other, with Latvia lagging by a few hundred. A notable statistic is the decrease in population for both Latvia and Lithuania during the period of 2005-2016. The population for both countries was lower by over 400 thousand people, and all three countries are experiencing a negative population growth rate and an aging populace. In terms of FDI, Lithuania attracted the largest amount in 2016, but total FDI stock as a percentage of gross domestic product remains the highest in Estonia at 89.30% compared to 57% for Latvia and 34.30% for Lithuania.

Baltic Economic Statistics 1995-2016			
1995			
	Estonia	Latvia	Lithuania
Population*	1.5	2.3	3.6
GDP*	\$9,027	\$13,688	\$21,947
GDP/Capita	\$6,234	\$5,508	\$5,924
FDI Inflow*	\$147.80	\$14.00	\$18.50
2005			
	Estonia	Latvia	Lithuania
Population*	1.3	2.3	3.5
GDP*	\$22,376	\$31,002	\$48,263
GDP/Capita	\$16,466	\$13,848	\$14,526
FDI Inflow*	\$2,250.90	\$1,620.30	\$845.88
2016			
	Estonia	Latvia	Lithuania
Population*	1.3	1.9	2.8
GDP*	\$39,136	\$50,137	\$85,652
GDP/Capita	\$29,741	\$25,589	\$29,862
FDI Inflow*	\$827.20	\$126.10	\$962.30
Inward FDI Stock (% of GDP)	89.30%	57.00%	34.30%
*Note: Population, GDP, and FDI Inflow are in Millions. Data from: World Bank, OCED			

Concerns for Estonia

Despite all the advancements made by Estonia in achieving a sustainable level of economic growth, there are a few factors that pose challenges for the country going forwards. One such factor is low added value per employee. This problem has attempted to be rectified through attempting to better educate the labor force and attract more knowledge-based entrepreneurship; however, value-added per employee has remained around seventy percent of the European Union average, (Estonia Ministry of Economic Affairs). The growth rate of exports has also decreased, and in some instances was negative, in the last half of the 2010s, and because the Estonian economy is so heavily based on exports, this may slow down growth in the future. Total exports in 2014 were valued at \$16,042 million but had dropped to \$12,829 million in 2015 and had only recovered to \$14,480 million in 2017. These reductions in exports coincided with a decline in gross domestic product as well. Estonia's GDP in 2014 was \$26.21 billion but had declined to \$22.46 billion in 2015. Estonia is heavily dependent on the performance of the global economy, so they are more susceptible to being affected by shocks in the international market. A key example of this was during the "Great Recession" beginning in late 2007. As global markets slowed, Estonia saw exports shrink by over twenty-five percent to a value of \$9,064 million and gross domestic product fell from \$24.19 billion in 2008 to \$19.65 billion in 2009 (IMF 2018). A final problem facing Estonia's continued development is the shrinking of its labor force. Since 2016 the labor force has been shrinking and this has further exacerbated the challenges Estonia has had in attracting both skilled and unskilled labor. To combat the shrinking labor force, Estonia has passed many policies making it easier for firms to hire foreign workers including the

Aliens Act in 2013 which reduced the process it took foreign specialists to be approved to live and work in Estonia to a week rather than the three to six months it took previously, (U.S. Department of State 2014). With a contracting labor force, the issue of lagging labor efficiency is further compounded and improving the value-added per employee is a key focus going forward.

Closing

Foreign direct investment has played a major role in developing Estonia's economic system since the country's re-establishment in 1991. The focus on the country has been to incentivize outside agents to build up Estonia's capital quickly and efficiently in a manner that would have been otherwise much more difficult due to the lack of public and private savings during the transition era. Integration into the global community, specifically the European Union has allowed Estonia to expand the market for their goods and services, and exports have driven the growth in the economy. Real wages of Estonians are growing as nominal wages are increasing close to seven percent per year, higher than the rate of inflation (U.S. Department of State 2014). Real GDP per capita has also seen a substantial increase as Estonia climbs closer to the other member countries of the European Union with plans in place to continue to increase productivity and efficiency. Estonia has strived, through methods such as simplified taxes and legal protections, in its ability to bring foreign investment into the country, and through transparent governance has remained attractive for outside firms. Foreign direct investment is the backbone of the Estonian economy and was the major factor in Estonia's ability to move from post-Soviet state to modern economy.

BIBLIOGRAPHY

- Basdevant, Oliver, and Ulo Kaasik. "Analyzing the Prospects of Estonia Using a Macroeconomic Model." *Eastern European Economics*, vol. 41, no. 4, Aug. 2003, pp. 38–71.
- Brown, William S. "Economic Transition in Estonia." *Journal of Economic Issues*, vol. 27, no. 2, 1993, pp. 493–503., doi:10.1080/00213624.1993.11505432.
- Department of State, United States. "2014 Investment Climate Statement ." June 2014, doi:<https://www.state.gov/documents/organization/227169.pdf>.
- Dobeli, Barbara, and Marcin Kolasa. "Comparing the Growth Performance of the New EU Countries." *Eastern European Economics*, vol. 45, no. 5, 2007, pp. 55–68., doi:10.2753/eee0012-8775450503.
- Estonia Institute. "Estonica." *Estonica.org - History*, www.estonica.org/en/History/.
- Estonia, Ministry of Economic Affairs. "Economic Development." *Ministry of Economic Affairs and Communications*, www.mkm.ee/en/objectives-activities/economic-development.
- Hoag, John, and Mark Kasoff. "Estonia in Transition." *Journal of Economic Issues*, vol. 33, no. 4, 1994, pp. 919–931., doi:10.1080/00213624.1999.11506221.
- International Monetary Fund. "Estonia Direction of Trade Statistics." *Data.imf.org*, data.imf.org/?sk.
- Kalcheva, Katerina. "The Impact of the Euro-Dollar Exchange Rate on Countries with a Currency Board: The Case of Estonia and Bulgaria." *Eastern European Economics*, vol. 41, no. 2, 1 Mar. 2003, pp. 42–68. *JSTOR*, www.jstor.org/stable/10.2307/4380332?refreqid=search-gateway:109fa86050a659d58bec28733e2870ff.
- Levchenko, Andrei, and Jing Zhang. "Comparative Advantage and the Welfare Impact of European Integration." 2012, doi:10.3386/w18061.
- Murrell, Peter. "What Is Shock Therapy? What Did It Do in Poland and Russia?" *Post-Soviet Affairs*, vol. 9, no. 2, 1993, pp. 111–140.
- Observatory of Economic Complexity. "Estonia Exports." *The Observatory of Economic Complexity*, atlas.media.mit.edu/en/visualize/tree_map/hs92/export/show/all/7204/1995/.
- Organisation for Economic Co-operation and Development. "Estonia - OECD Data." *The OECD*, data.oecd.org/estonia.htm.

Raun, Toivo U. *Estonia and the Estonians*. Hoover Inst. Press, 2002.

Reardon, Jack. "An Assessment of the Transition to a Market Economy in the Baltic Republics." *Journal of Economic Issues*, vol. 30, no. 2, 1996, pp. 629–638., doi:10.1080/00213624.1996.11505827.

Reardon, Jack. "The Development of the Market System in the Baltic Republics." *Journal of Economic Issues*, vol. 27, no. 2, June 1993.

Sohinger, Jasminka. "Growth and Convergence in European Transition Economies: The Impact of Foreign Direct Investment." *Eastern European Economics*, vol. 43, no. 2, Mar. 2005, pp. 73–94.

<http://statistika.eestipank.ee/#/en/p/436/r/2014/1863>

Tarmisto, Vello Julius, and Aivars Stranga. "Estonia." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 13 Jan. 2017, www.britannica.com/place/Estonia/Cultural-life#ref418725.

Telatar, Erdinc. "Purchasing Power Parity in Central and East European Countries." *Eastern European Economics*, vol. 47, no. 5, 2009, pp. 25–41., doi:10.2753/eee0012-8775470502.