Macroeconomic Dynamics

Kazakhstan: A Case Study

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Abstract

An analysis of the Kazakhstani economy, tracing its various faculties from the country's inception in 1991. Discusses the various policies adopted by the National Bank of Kazakhstan and the Kazakhstani Government to combat the several problems that have arisen, with special emphasis on inflation and business environments. Concludes with a SWOC Analysis of the Economy.

All opinions and views reflected in this paper are representative of the author and are not endorsed by the organization.

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"Сауда сақалыңызды сoғып жатқан кезде жүреді."

"Trade occurs while you are stroking your beard." – Kazakhstani Proverb

Long before formal borders, ideologies and oil rigs came into being, the Kazakhstani people were an orderly, productive community, living in both small, nomadic collectives as well as technologically progressive, urban set-ups (Curtis, 1996). Through this study, the fate of the modern Kazakhstani state will be evaluated on three broad policy parameters – monetary, fiscal and commercial. Data has been given immense importance through this assessment. Conclusions are data-backed – with a strong emphasis placed on quantitave techniques which create posteriori culminations.

Note: All data and the reasoning behind the selection of the aforementioned data is available in the appendix.

I.

1) Ecological Faculties: A Survey of Kazakhstan's Immense Mineral Deposits

See: Map #1

As the state with the second largest uranium deposits in the world, Kazakhstan is bound to have a thriving radioactive material market (Mining Technology, 2015). This market is dominated by the former USSR-owned Kazatomprom, which is state owned. Along with a few foreign tie-ups, Kazatomprom plays a role in over half the uranium production in the country. While Kazakhstan themselves do not produce a single Watt of energy using nuclear energy, it is inevitable that they will soon turn to this renewable form of energy production which would be prudent considering the large deposits they are already in possession of.

Several international players are involved in the Kazakhstani metal markets, including the famed Rio Tinto. Copper, tin and lead, all three, are profitable ventures that tend to involve public-private partnerships. This has been the case even over the past few years, when commodity prices have hit rock-bottom due to increased supply from other developing markets (CRU, 2014).

Kazakhstan's most lucrative export, petroleum and other oil-related products, has played a large role in its economy since the country's nascence. Of all external shocks that the Kazakhstani economy is vulnerable to, none are more potent than that of falling oil prices. The current non-oil fiscal deficit stands at 10.2%, which is 2% more than it was prior to the 2008 Crisis (World Bank, 2017). Subsequent sections will demarcate areas of concern for oil-related ventures, and how the economy can combat these problems if they do arise.

While the given graphs do not display absolute congruency, there is an obtrusive trend that exists between oil prices and the National Income of Kazakhstan. Comprising 48% of all exports in 2015, crude oil is the foundation of Kazakhstan's Balance of Payments (BoP) status. With a weakening Tenge, the shale boom and a belligerent Saudi Arabia, there came about an adverse BoP situation, caused mainly due to crashing oil prices.

2) Demographics: Divide or Dividend

From the outset, it can be hypothesized that the mid-2000s economic boom that Kazakhstan experienced can be a result of a 'Demographic Dividend'. A falling population in the mid-90s implies less government support to birthing mothers, school-going children and prospective employees – allowing the government to divert more resources toward spending on capacity expanding. Recent spikes in the population, however, are likely to strain resources. The Age-Dependency ratio remains constant through the same period – thus beckoning the question as to how Kazakhstan's public sector managed to cater to the same numerical cohort while being able to generate an atmosphere more conducive to investment.

Going against the trend, Kazakhstan's Rural Population has risen over the past 2 decades. However, this increase comes with a substantial decrease in the Value Added by Agriculture, which covers not only hardcore agriculture but also occupations such as fishing, hunting and livestock production, which are professions typical of Kazakhstan's bucolic setting. Another conundrum is thrown when we examine Graph #7, which shows that Kazakhstan has one of the world's highest arable land per person, yet the value added by Agriculture remains dismally low.

Agriculture and animal-rearing is something that has historically been a feature of Kazakhstani society, and with a little government impetus it can revive itself into one of the country's most productive economic assets.

II.

1) Fiscal Policy in Kazakhstan

See: Tax Revenue and GDP Relation

Through the analysis of Kazakhstan's fiscal policy, special emphasis will be laid on the tax regime and how reforms within the same will exacerbate the ease with which domestic and international entities can pay their taxes, as well as incentivize investment.

Budgeting revenues for the government arise from two main sources, i.e. taxes and transfer payments. The Tax Code is comprehensive and countercyclical. It is consistent with the Brettonwood Institutions' expectations. The actual tax rates will be analyzed first, prior to detailing policy suggestions.

i. Tax Rates

Category	**Tax Rate**	**Exceptions**
Corporate Income Tax	20%	Loss making firms
Capital Gains Tax	15%	Capital loss making entities
VAT	12%	Exporting Firms
Personal Income Tax	10%	-

ii. Policy Suggestions

a) Medium-Term Fiscal Consolidation

As suggested by the IMF, the core of any major shift in Fiscal Policy or stimulus must be to reduce the economy's fiscal deficit. The stimulus package of 2014 (comprised of both domestic funds and international debt) aims at reviving ailing infrastructure and giving local enterprises an impetus to borrow and expand. To ensure macroeconomic fiscal stability, a mild form of austerity is being advocated by the IMF (IMF, 2017). While the arguments against the inevitable privatization are in abundance, if we are to retrospectively gauge the effects of a freer Kazakhstan, reconciling with austerity is less fantastical.

b) Reforming Special Economic Zones

Created by Presidential decree, Kazakhstan has a number of Special Economic Zones which offer a vast range of incentives to firms, such as income and property tax exemptions. These zones create incredible network externalities however they are a huge source of taxable income that remains untapped. While the ethos of an SEZ is to promote enterprise, this should not come at the cost of burgeoning government debt. The gestation period for SEZs is 25 years, implying that tax revenues out of the SEZ will only flow after this period has lapsed. The term for government debt is much shorter, and there is an immediacy for enhanced budgeting revenue.

This can be done reducing the number of SEZs. Private enterprises operating in sectors such as petroleum have enough incentive to generate infrastructural capacities and continue engagement notwithstanding the tax breaks – their margins are and will be healthy. SEZs should be used to diversify Kazakhstan's increasingly monopolized repertoire – by giving impetus to industries like tourism, IT and logistics, not to incumbents such as oil and metals (Deloitte, 2016).

c) Progressive Income Taxation

Perhaps the most countercyclical of all suggestions, introducing a progressive taxation system for individuals would increase tax revenues almost instantly. This also creates an economic system that does not take away the same relative share from peasants in the farmlands of Chilinka, and the oligarchs of Astana. This policy shift must be coupled with well-defined brackets as well as vigilant monitoring and auditing of returns that are filed, as more people are likely to avoid and evade tax.

d) Adherence to the Tax Administration Reform Project

Set up in 2010, the TARP was co-funded by the Kazakhstani government and the World Bank. The Project seeks to create an atmosphere favorable to tax-paying and tax-payers alike, by implementing more efficient tax management and collection systems. Modern equipment and techniques have been used to streamline the previously cumbersome process (World Bank, 2016). The result of this Project can be seen in Graph #10, which shows that taxes have become easier to pay in Kazakhstan since 2010, when the Project was established.

Fiscal Rules: Vaccine to the Dutch Disease

The well-documented Dutch Disease details out how resource rich countries fail to reap the fullest benefit of their endowments – usually due an over-reliance on said resources. This leads to a long-run wage-price spiral, one that is dangerous to the real purchasing power of citizens both domestically and internationally due to fluctuations in the real exchange rate.

Fiscal rules are governmental regulations that seek to establish fiscal credibility, constraint and discipline. Objectives of the same include protracting countercyclical movements, creating an economy that can absorb shocks and establishing 'intergenerational equity' (Heritage, 2009).

The linchpin of any fiscal rule must be a decision regarding oil revenues and production. Ex ante projections of oil production and prices can allow the government to create a model wherein variables such as non-oil tax revenue, debt-GDP ratios and government spending are all taken into account. This model can be used to allow the Government to set requisite curbs on production and prices, to ensure that deficits are financed and that Kazakhstan is transformed into a diverse, robust and resilient economy.

2) Monetary Policy in Kazakhstan

To pursue a more active Monetary Policy, a Monetary Policy Committee is being set-up to assert the National Bank of Kazakhstan's authority over the monetary policy of the state. This is to disassociate monetary policy from other institutions which may have vested interests.

The monetary policy debate surrounding Kazakhstan and its future will be broken down into three sub-topics, delimitating three of monetary policy's most famed sons – interest rates, open market operations and exchange rates.

i. Interest Rates

As attested by the IMF, the main modality of Kazakhstani Monetary Policy is to ensure price stability, with interest rates being the most potent weapon to do the same. The Central Bank releases inflation targets, and also reveals monthly reports on year on year and month on month inflation figures. The benchmark interest rate of 17% was reintroduced in February 2016, when inflation was in the ballpark of 6%. The high rate was to gauge the markets responsiveness to the same, which led to several cuts taking place over the subsequent months, bringing the current benchmark rate to 12%. The 17% rate was simply to mitigate all risk and avoid major disruption.

ii. Open Market Operations

The National Bank, in accordance with its quantitative easing motives, offered several securities in an effort to contain money supply. These had several different terms and structures, with some short-term convertible notes being offered for terms of 7 and 28 days, while other bonds with duration of 3-5 years. All of them offered different spot-rates and yields, creating a surge in demand for the mentioned securities (NBK, 2017). It is clear that the Central Bank reduced its assets significantly in the years around 2007, giving an impetus to commercial banks to borrow and subsequently with greater vigorousness. This is reflected in a low asset to GDP ratio for the Central Bank, and a much higher asset to GDP ratio for Commercial Banks as well as a large volume of private credit being issued. The effect of this mass credit creation can be seen on the stock market as listed companies reached an all-time high in terms of valuation. All the three indicators subsided in the aftermath of the 2008 Crisis, and have not been able to recover since.

iii. Exchange Rate

The watershed moment in the field of exchange rates took place in 2015, when the National Bank vowed to target inflation by a more robust monetary policy – one aspect of which was floating the Tenge, as versus the band system it previously followed. This, in the market period, led to massive depreciation of the Tenge which shot up to above 300 Tenge/ Dollar. As reported by the IMF on the basis of statistics from the National Bank, there was a huge spike in the price of imported goods – especially non-food consumables. The effect of this depreciation led to galloping inflation rates. The current exchange rate has stablisied around 340 Tenge/ Dollar.

It is clear that the aim of all monetary policy is to target inflation in a manner dichotomized by fiscal policy – with the regulation of money supply and demand being at the core. It is imperative that Kazakhstan's active monetary policy decisions stem from the National Bank – unfazed by political agendas or motives. To assert their sovereignty over the market, the National Bank must gain enough influence over the short-term interest rates. This can be done by actively engaging in Open Market operations with securities of a shorter duration, and with a higher volume.

The slight contractionist stance must subside so as to give investment an impetus. A large part of the prevalent inflation is cost-push, as supply continues to lag behind demand. This in turn drives imports of expensive commodities, which weakens the Tenge even further. Generating domestic capacity is essential, especially in the sectors of agriculture and logistics. The exchange rate remains too vulnerable to exogenous shocks, whether they are oil, food or commodity. A floating rate is essential for a more vibrant monetary policy; however this vibrancy must be balanced with inflation containment using other monetary policy instruments.

While bringing down the benchmark interest rate will enhance investment, it must be sensitive to inflationary movements to ensure depositors a real return on their investments and thus incentivize formal banking.

3) Commercial Policy in Kazakhstan

As a country still going through teething processes, Kazakhstan took a few years to find its footing in the international trading scenario. What was initially a response to settling into its newfound freedom, the Trade-GDP ratio began to wane until the end of the 1990s. This took an extreme turn in the early 2000s, when Kazakhstan rose to prominence as a major oil producer and exporter.

This upward mobility in the sphere of trade is not restricted to the discovery of deposits; it is part of a fervent effort made by the Kazakhstani government to liberalize the economy. Several tariff and non-tariff barriers were slashed, as Kazakhstan began looking outward and upward.

i. Multilateral Organizations and Kazakhstan

To beef up its resume prior to acceding to the WTO, Kazakhstan joined the CAREC, wherein Central Asian countries reduce or trade tariffs using a clearing house system.

After accession to the WTO in 2015, the MFN principle came into force for Kazakhstan, which prompted it to sign a plethora of bilateral goods and services agreements. While Kazakhstan remains agnostic toward its trading partners, geographical externalities and proximities create an atmosphere where in Kazakhstan realizes its comparative advantage by trading with its neighbors, China and Russia.

This affinity toward Russia is both historic as futuristic. This was consolidated in 2009, when a customs union was formed between Belarus, Russia and Kazakhstan. This was the precursor to the Single Economic Space, or the Eurasian Economic Union that came into being in 2012. This is a single integrated market, drawn along the lines of the European Economic Area, with free flowing real capital, services and goods. An effect of this Union is visible on the revenue stemming from customs and import duties, which dipped in the years succeeding 2012.

This propinquity is symptomatic of an over-reliance on exporting partners; however Kazakhstan has a diverse portfolio of exporting partners. Another development likely to strengthen this contiguity is China's 'One Belt, One Road' initiative that aims at creating transport and logistical frameworks all across the once-famed Silk Route. Kazakhstan is likely to be figuratively and literally at the heart of this project, offering its unique spatial lineament to this venture. Being the link between Central Asia and Eastern Europe, with ports set-up on the Caspian Sea, Kazakhstan has vast transportation potential that must be tapped into. The OBOR will do precisely that, while slowing down the depreciation process in Kazakhstan by instituting high-level infrastructure.

ii. Ease of Doing Business in Kazakhstan

While the most overt indicator to measure the aforementioned feature is the Ease of Doing Business Index (Kazakhstan is ranked an impressive 35), it is essential to look for other factors that can paint a more holistic picture about the Business Environment in Kazakhstan.

To bolster domestic enterprise, Kazakhstan has been working on easing regulation on a number of Soviet-era controls. This has led to a jump in the number of businesses in the nation, as seemingly innocuous reforms such as the requirement of notarization, and of company seals have played a large role in making enterprise more accessible to the population at large.

As Government revenues began to swell, their focus on developing secondary education infrastructure has a direct effect on commercial indicators of advancing enterprise, such as the number of patent and trademark filings which display a mild positive trend. The actual start-up cost has decreased significantly, to 0.3% of per capita Gross National Income, and the number of processes in place to set up a business too has decreased.

iii. Competition Law in Kazakhstan

Perhaps not the most conventional facet of Commercial Policy focused on, competition laws play a large role in making Kazakhstan more accessible to business. The KREMZK, the National Anti-Trust Body, is pro-active in its efforts to regulate the market, with attempts made to ensure that barriers to entry exist only in specific contexts and that markets stray from monopolization.

To improve the efficiency of their already commendable work, the KREMZK must be more incisive in its regulation. Instead of prosecuting any parallel price movements under the pretext of cartelization, definitive proof of collusion must be obtained. Similarly, vertical mergers and acquisitions must only be prohibited in the event of severe disruption based on empirical evidence. Increasing the engagement with anti-dumping duties should also be under the purview of the KREMZK, to ensure that markets are not skewed in favor of any player.

Kazakhstan's BoP status remains contingent on commodity price shocks, and fluctuations in the same deter the quantum of investment flowing into the country. To catalyze investment, deregulation must take place at the pace it has been recently. Disinvesting and partly easing state controls on public monopolies will lead to an inflow of foreign capital and investment, which can be harnessed into large state revenues.

A heavily regulated transition to privatization will serve the Kazakhstani governments interests – allowing them to ensure an unbiased market as well as levying taxes in a manner that maximizes revenue.

III.

Net Depreciation

Depreciation connotes a gradual decrease in value, and can be attributed to obsolescence and physical factors, however an interpretation of depreciation that is overlooked is one caused by stagnation.

Kazakhstan, today, faces this prospect of stagnation. It's over-reliance on its physical faculties will be detrimental to its long term viability as a healthy economy. It must actively diversify away from these incumbents to mould itself into a dynamic, thriving economy. It runs the risk of becoming a one-trick pony, something that the government has been actively trying to combat.

In terms of literal depreciation, there is no simpler remedy than boosted investment – be it from governments or private institutions. To attract investment, Kazakhstan must formally establish itself as the Financial Heart of Central Asia. It should welcome foreign investment in all sectors, while bolstering domestic enterprise by deregulating access to credit and commerce, while monitoring all operations with renewed vigor. This monitoring should not, however, come at the cost of economic freedom that enterprises must enjoy. Regulation must be prudent and sectoral, ensuring that revenues from export-friendly sectors are maximized, and that import substitution becomes an integral part of domestic policy. Kazakhstan's worrying fiscal deficit is likely to widen if imports continue to dominate such a large part of domestic consumption.

The existence of public monopolies creates deadweight, an opportunity cost that is overlooked due to government branding of monopolies as a socio-economic necessity. This form of depreciation is tangible and hazardous considering how it is hiding in plain-sight.

Finally, infrastructural depreciation (highest accounting depreciation in Kazakhstan) can be curtailed through projects like the 'One Belt, One Road,' as well as by indulging in PPPs or BoT models, especially for transport and logistics.

SWOC Analysis

Sr. No.	Area	Strengths	Weaknesses	Opportunities	Challenges
1)	Inflation	Recently floated currency resulting in greater control over money market	Passive Monetary Authority	Gain influence over short term interest rate	Weakening currency likely to increase inflation
		Robust corporate tax system	Flat personal tax system	Reforming SEZs	Increasing fiscal deficit
		Growing business and investment climate	Adverse BoP Situation	Disinvestment and diversification	Increasing fiscal deficit
2)	Business Climate	Growing FDI due to deregulation	State control over industries	Well-educated, settled population	Governmental focus on selected sectors
3)	Demand	Low unemployment	Decline in real wages	Meeting inflation targets	Rampant inflation
4)	Supply	Well-located, easy to set up businesses	Inflated operating costs with low demand	Low regulation, easy to set up businesses	Governmental focus on selected sectors
5)	Agriculture	Great climatic conditions and domestic demand	Imported at low rates	Import substitution through fiscal incentives and modernization	Prevalent disguised unemployment, low returns

6)	Overall	Business, market oriented	Too vulnerable to shocks	Diversification	Preoccupation with oil and mineral sectors

Academic Takeaways

Through this project, there has been a sense of professionalism and maturity. In an effort to make this exercise as academic as possible, I allowed my peers to select the country I would be studying. Through a short survey of 36 respondents, an order of preference was selected which was then submitted. It is unlikely that a workplace would afford an opportunity to select one's own field of study – thus, this process ensured that the experience would be modeled around reality as much as possible.

From the outset, this project has taught me the macroeconomic dynamics in a manner that has invigorated interest in a vast variety of fields. Theoretical concepts have been dissected and scrutinized through this project, offering a unique connect between classroom and reality. Policy decisions made in the real world stem from simple concepts studied in class.

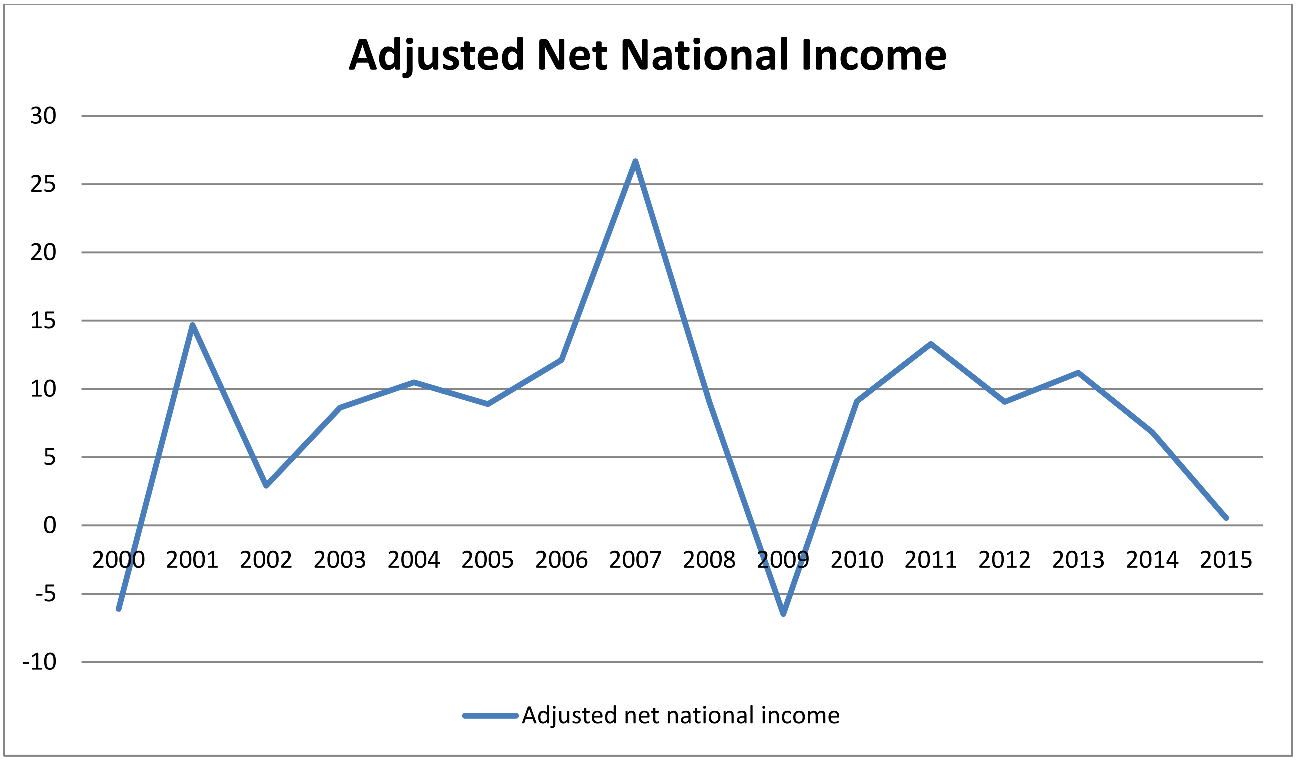
Perhaps the most enriching of all takeaways has been a lesson in prudential statistics. There is an unimaginable amount of data available; however it is the task of the researcher to select statistics and data that is meaningful and appropriate. Moving further, the choice of statistical tools is an important process in the exercise. The differences between correlation, causation, regression etc. have been reinforced through this project, a reminder that statistics can be construed to suit conclusions very easily.

Sifting through existing academic literature on a plethora of fields in limited amounts of time was a lesson in organization and patience. The incredible number of reports, releases and papers regarding every small facet of an economy is daunting, and learning how to summarize this information is a skill that is valuable beyond belief.

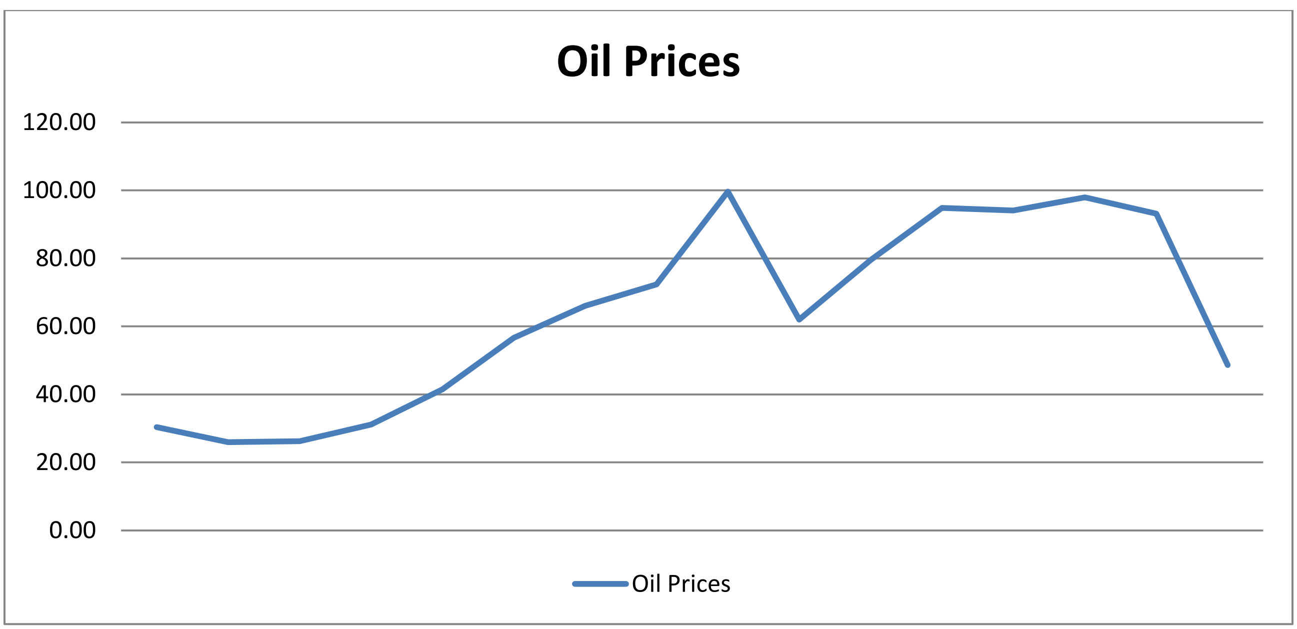
Appendix

Graphs – *All data is from the World Bank, unless specifically mentioned otherwise*

Graph #1 –NNP Growth

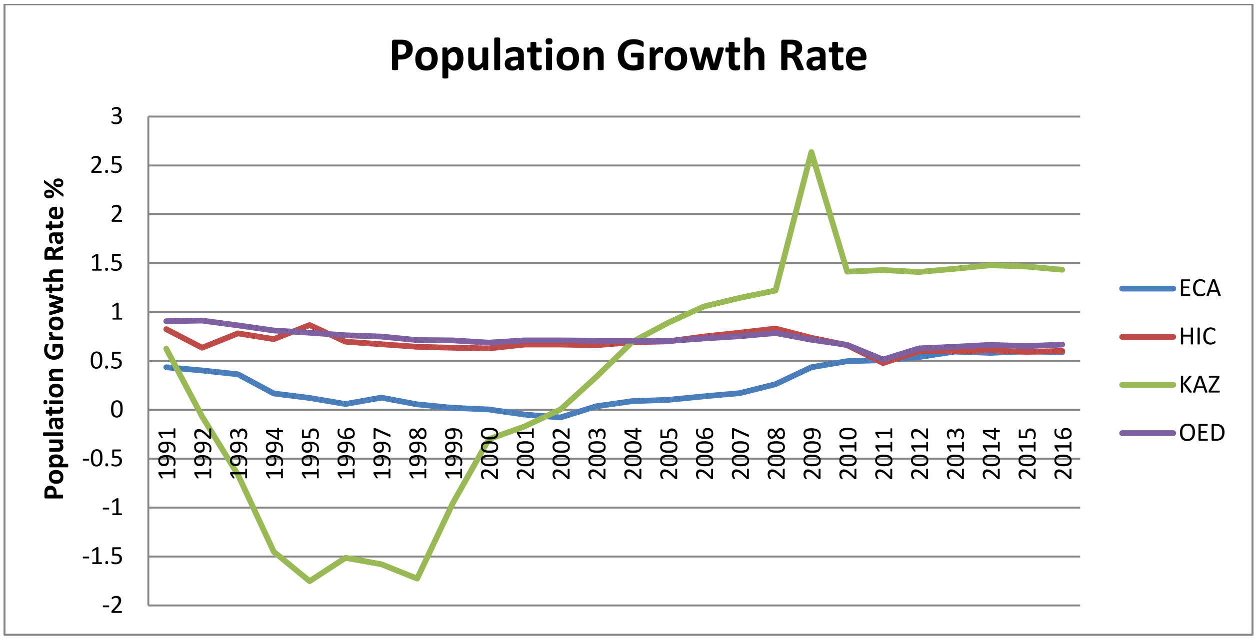


Graph #2 – Oil Prices

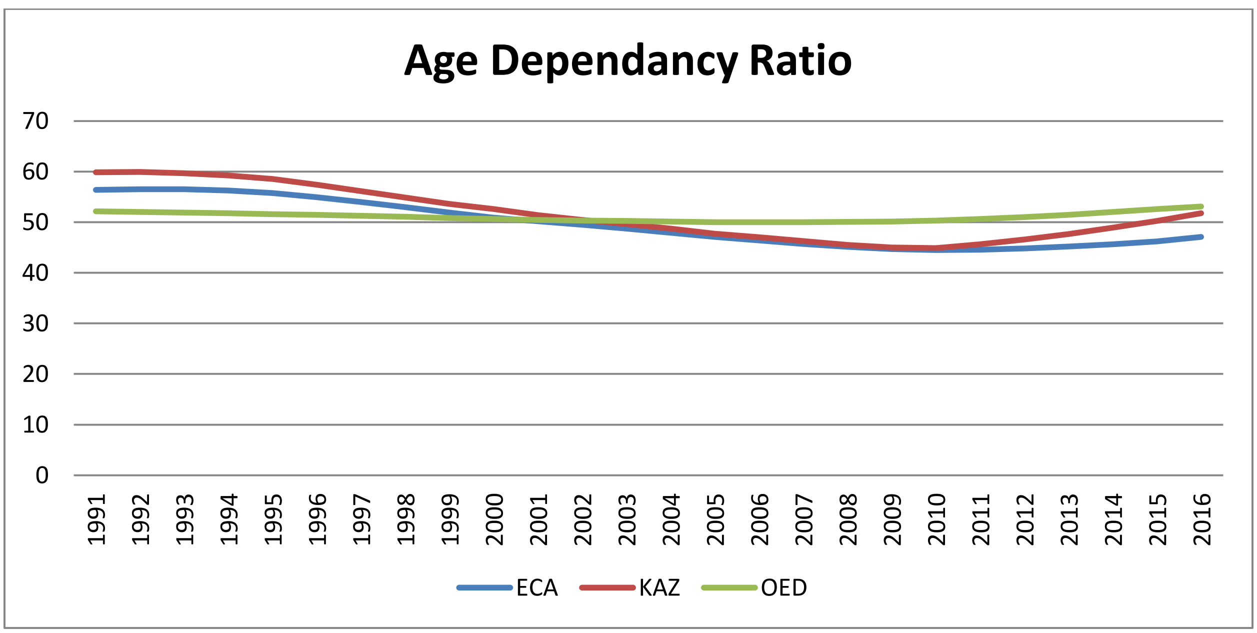


(Crude Oil Prices: West Texas Intermediate (WTI), Dollars per Barrel)

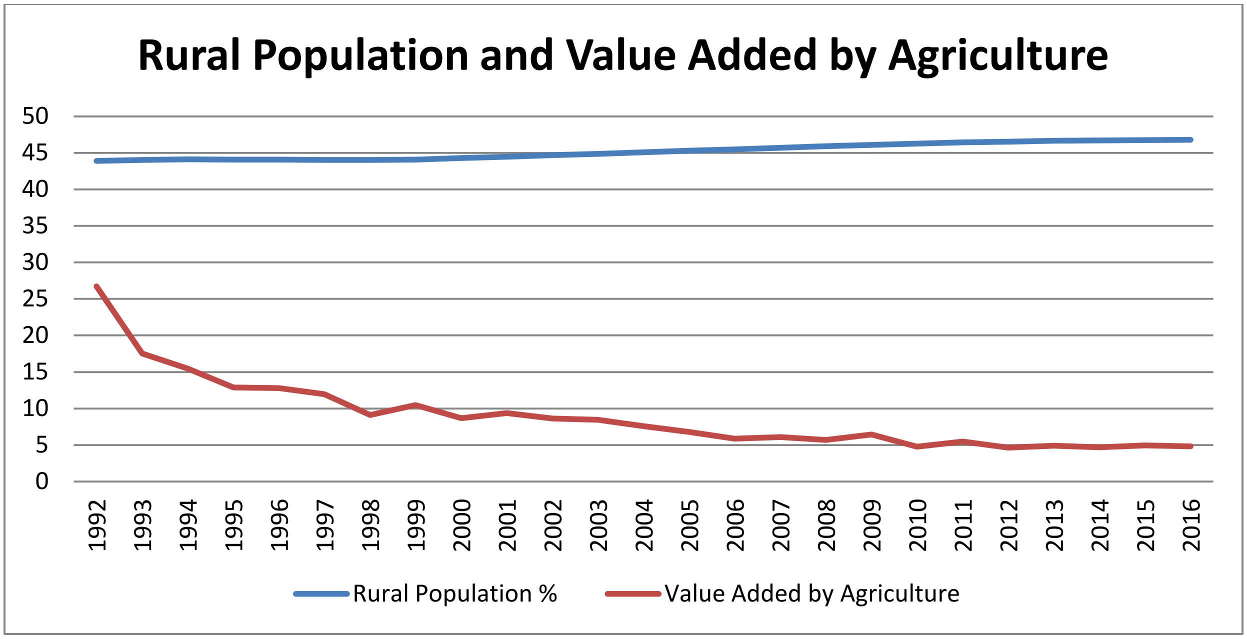
Graph #3 – Population Growth Rate



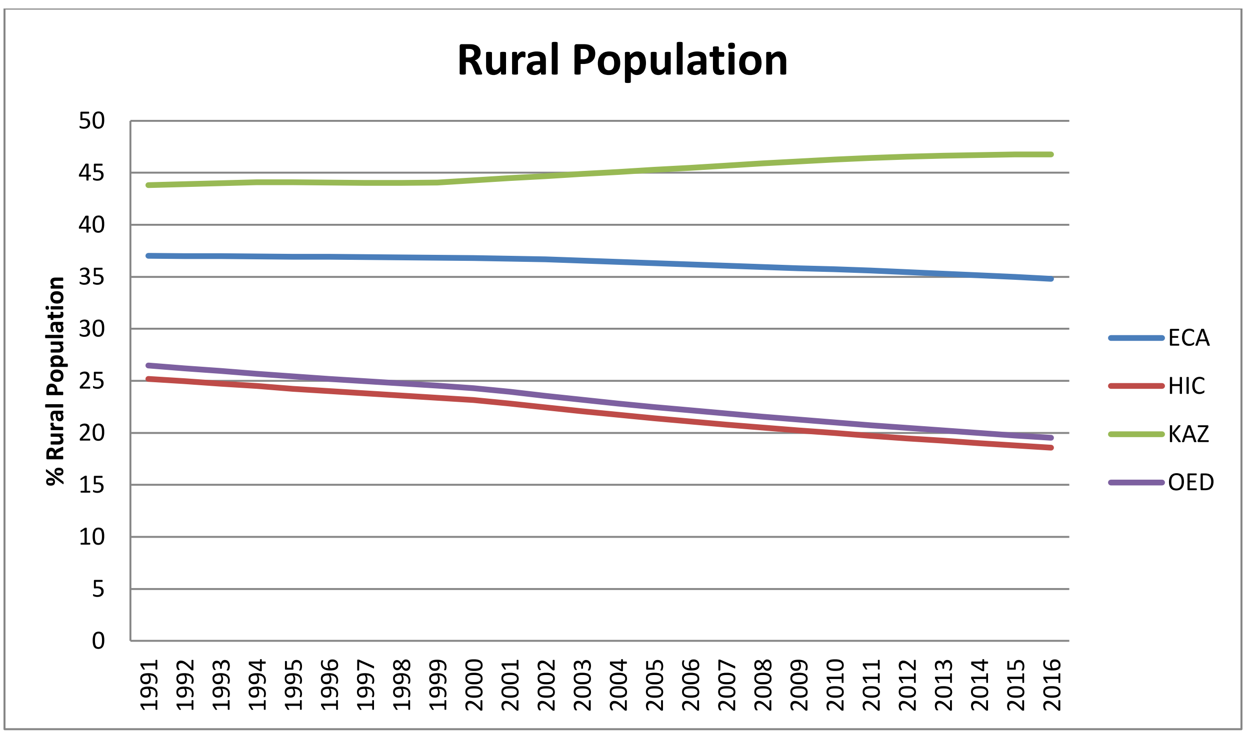
Graph #4 – Age Dependency Ratio



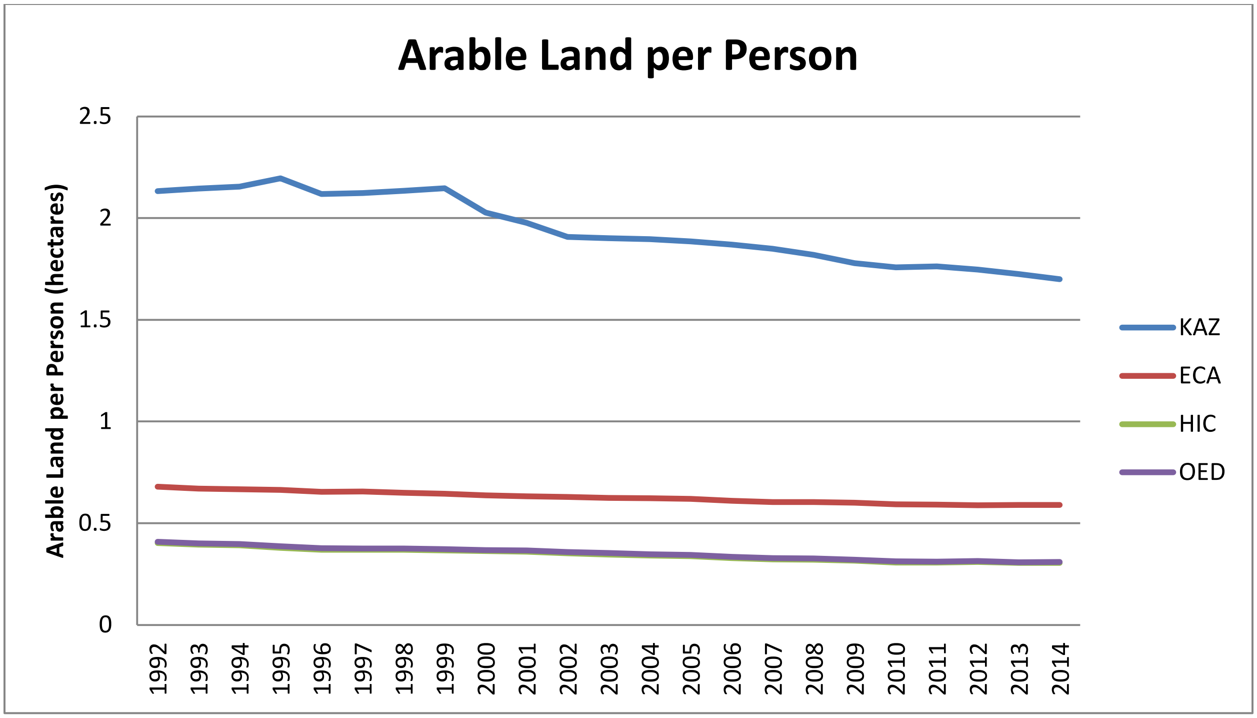
Graph #5 – Rural Population Growth and Value Added by Agriculture



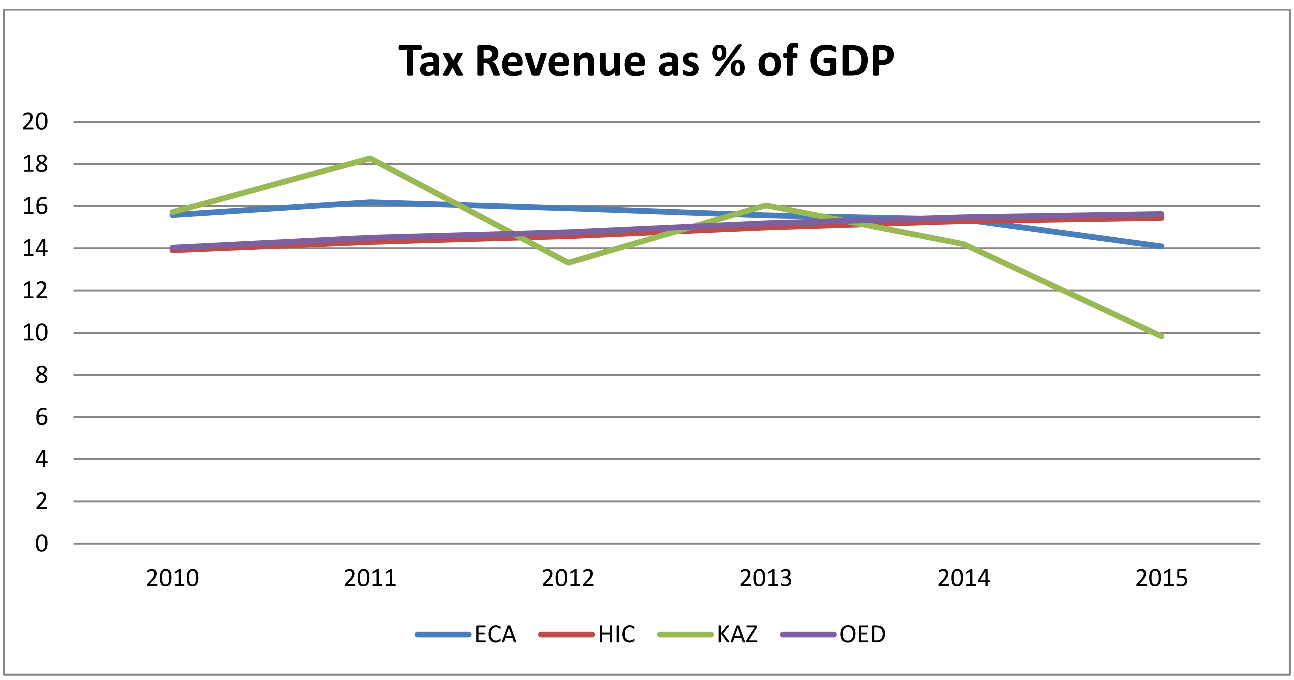
Graph #6 – Rural Population



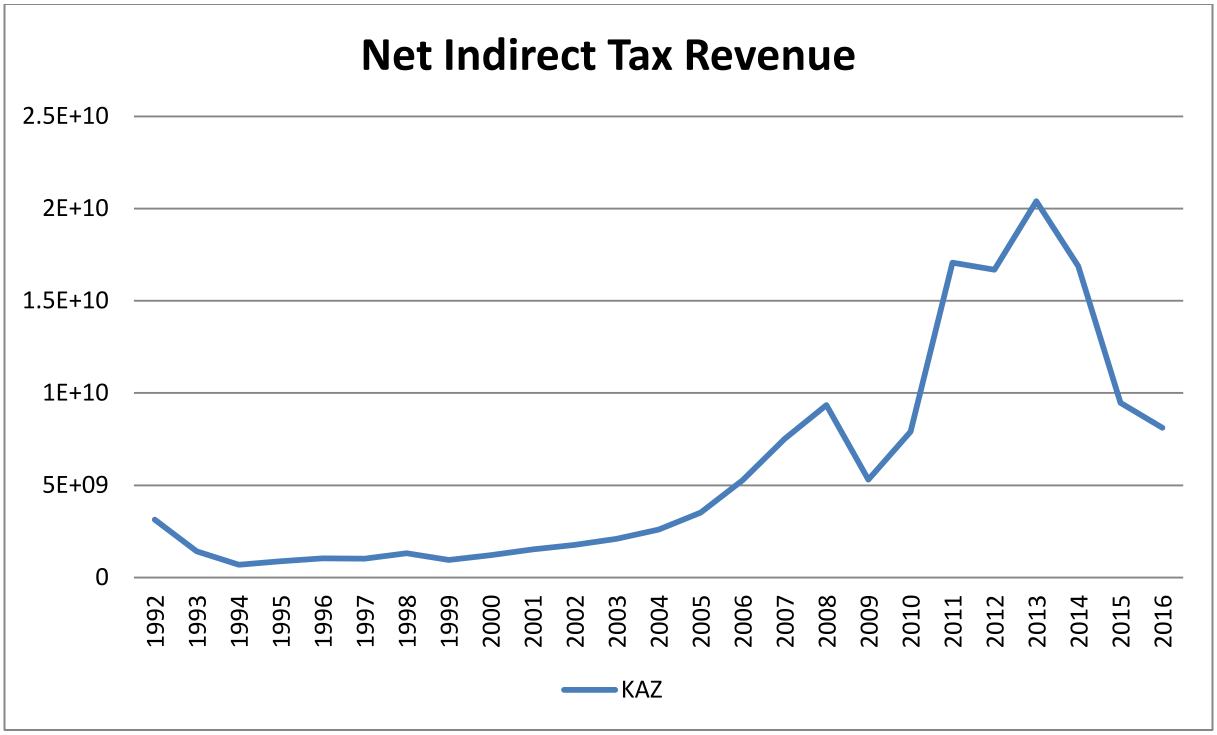
Graph #7 – Arable Land per Person



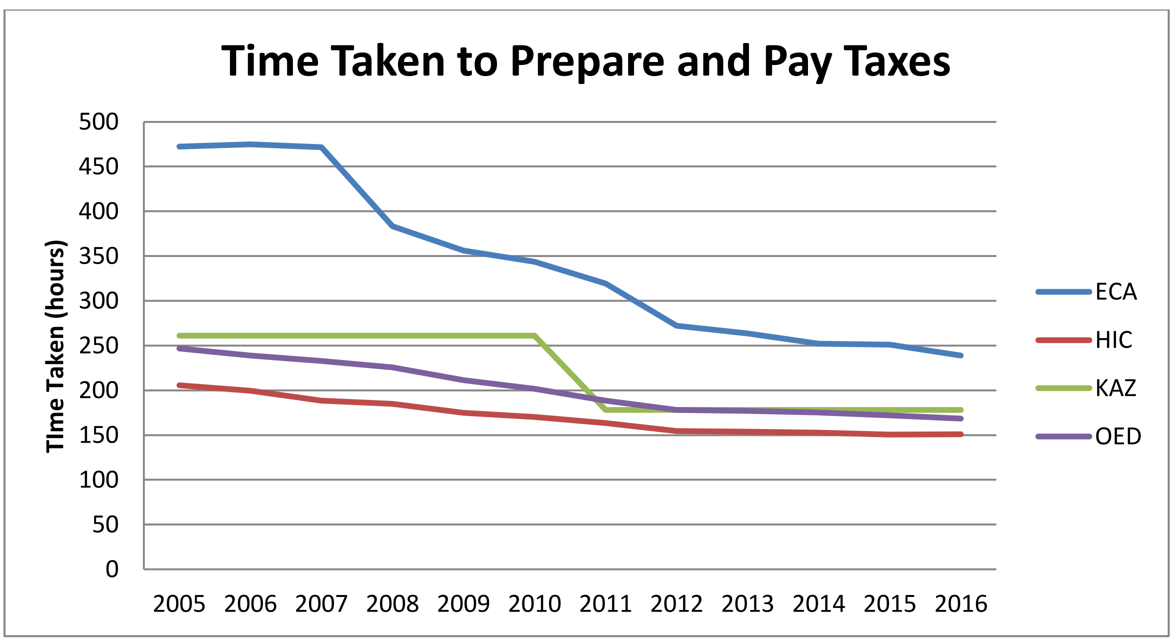
Graph #8 – Tax Revenue and GDP



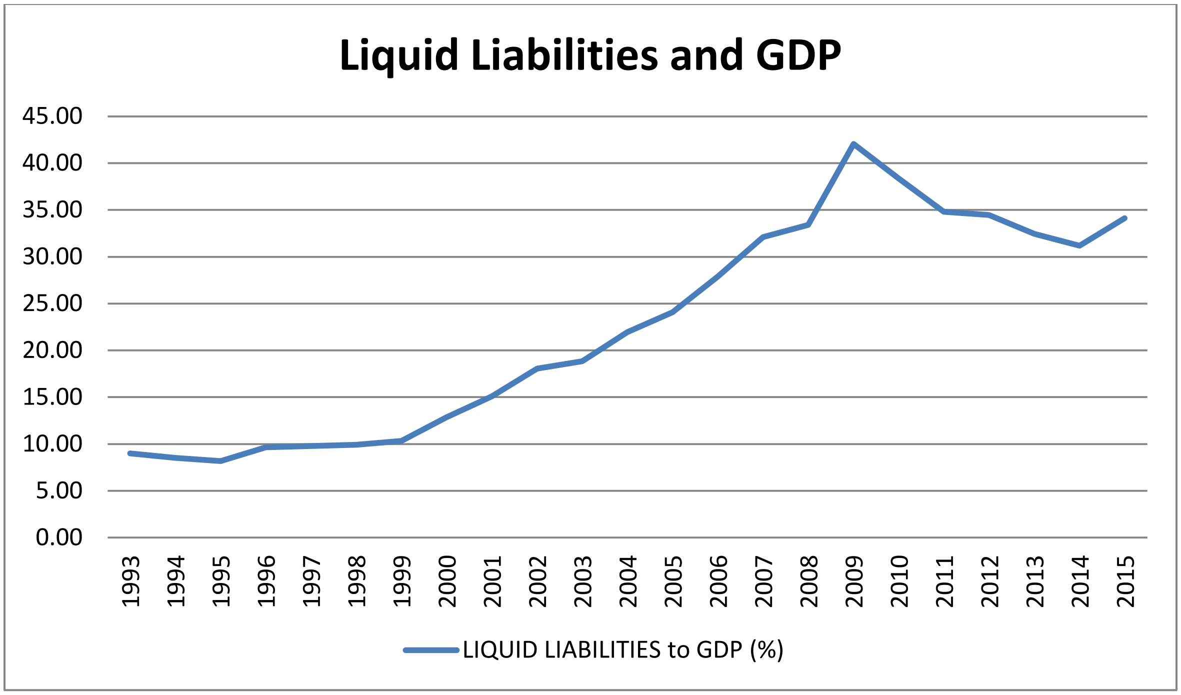
Graph #9 – Net Indirect Taxes



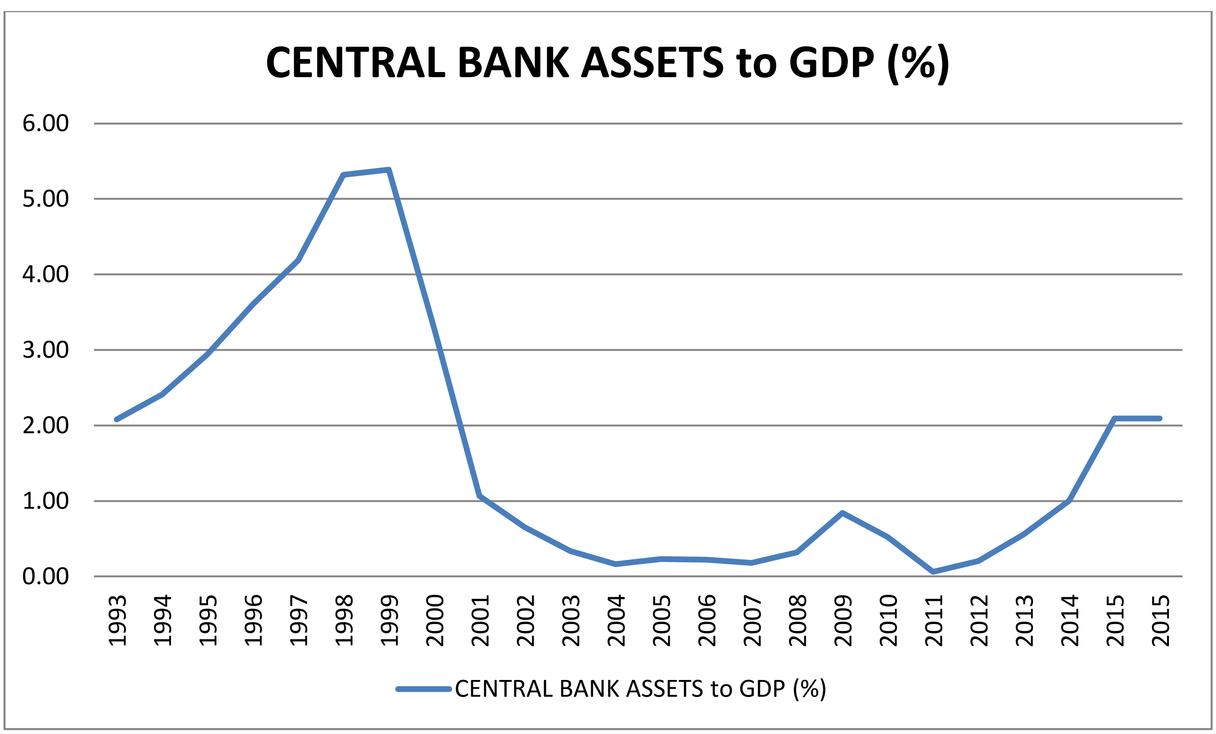
Graph #10 – Time Taken to Prepare and Pay Taxes



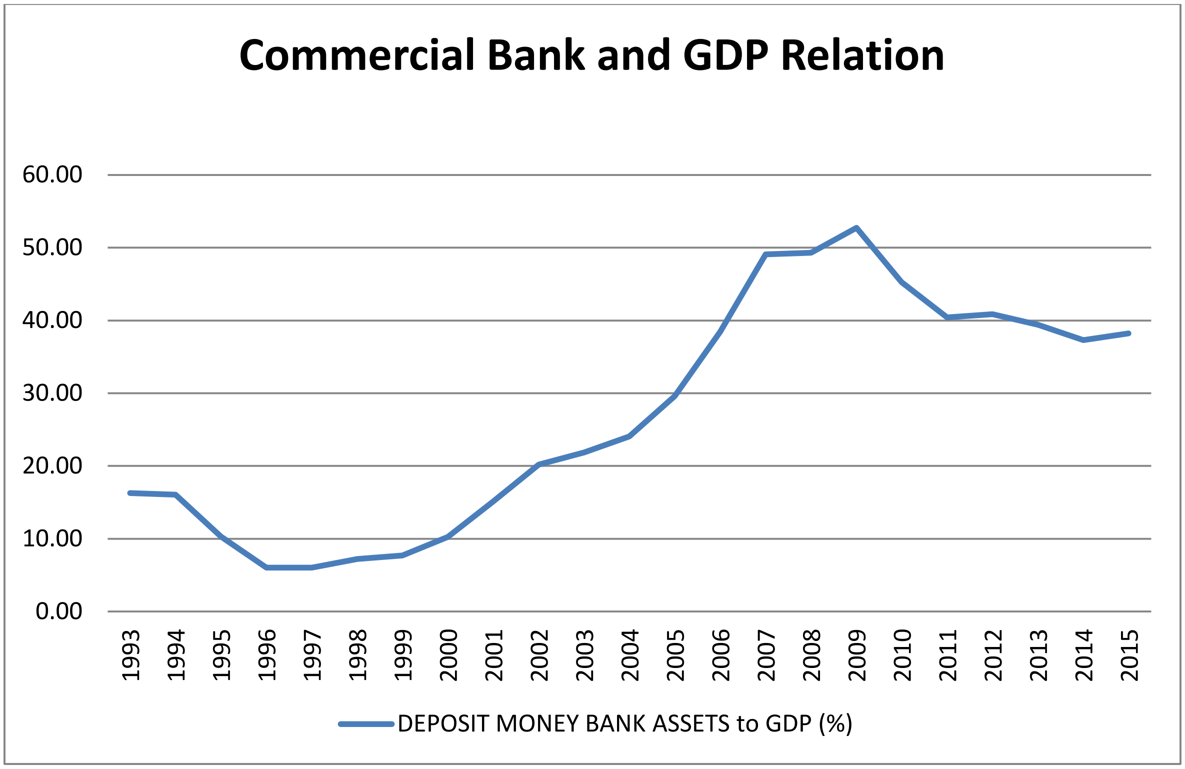
Graph #11 – Liquid Liabilities



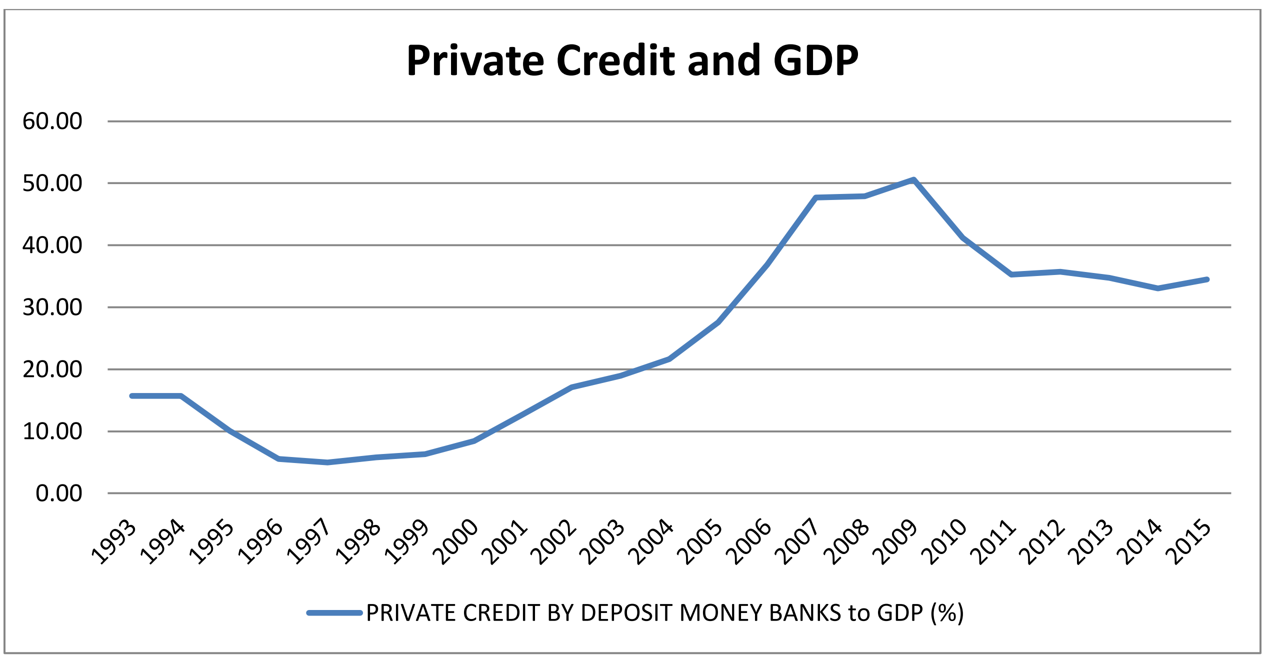
Graph #12 – Central Bank and GDP



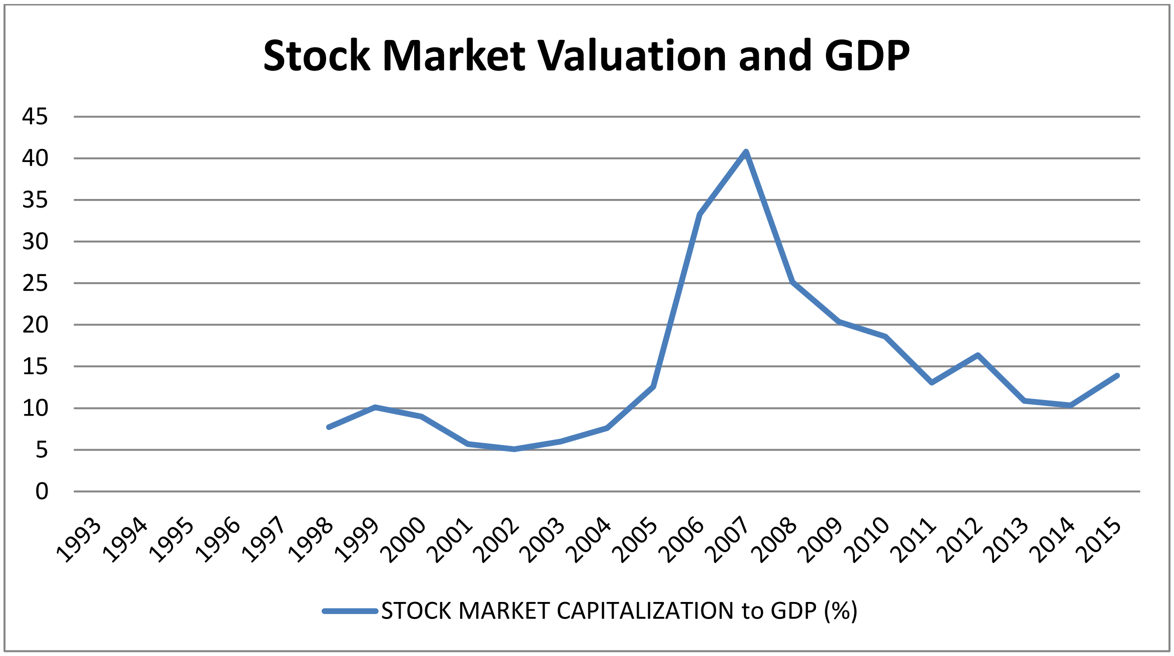
Graph #13 – Commercial Bank and GDP



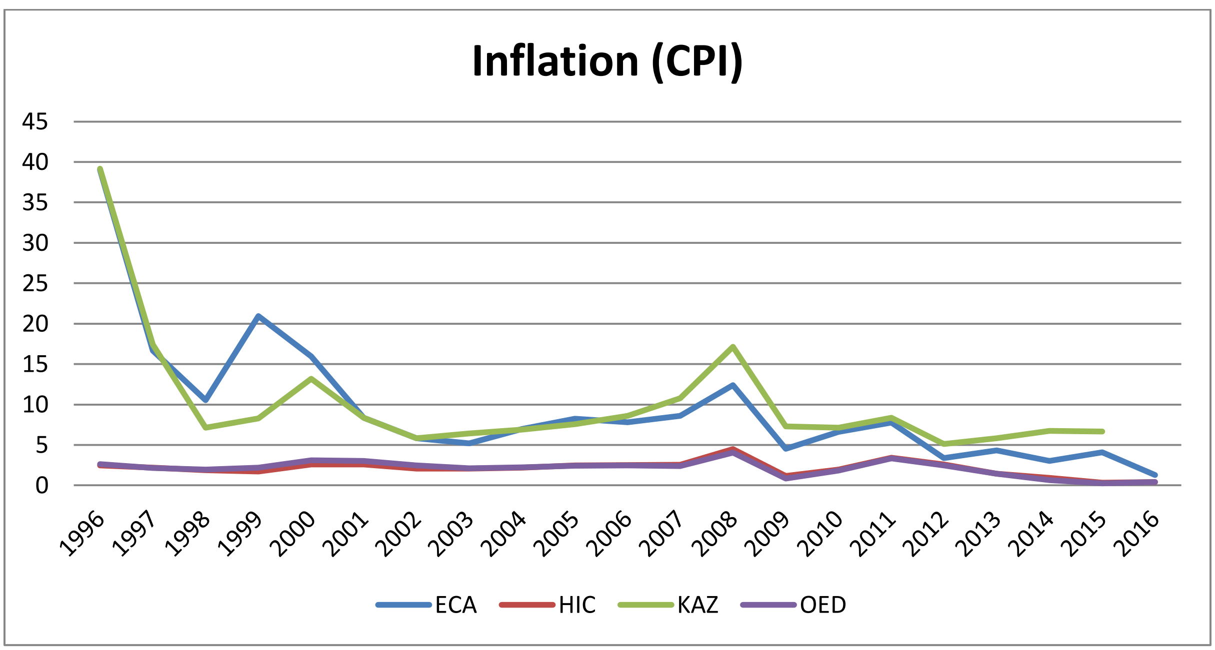
Graph #14 – Private Credit and GDP



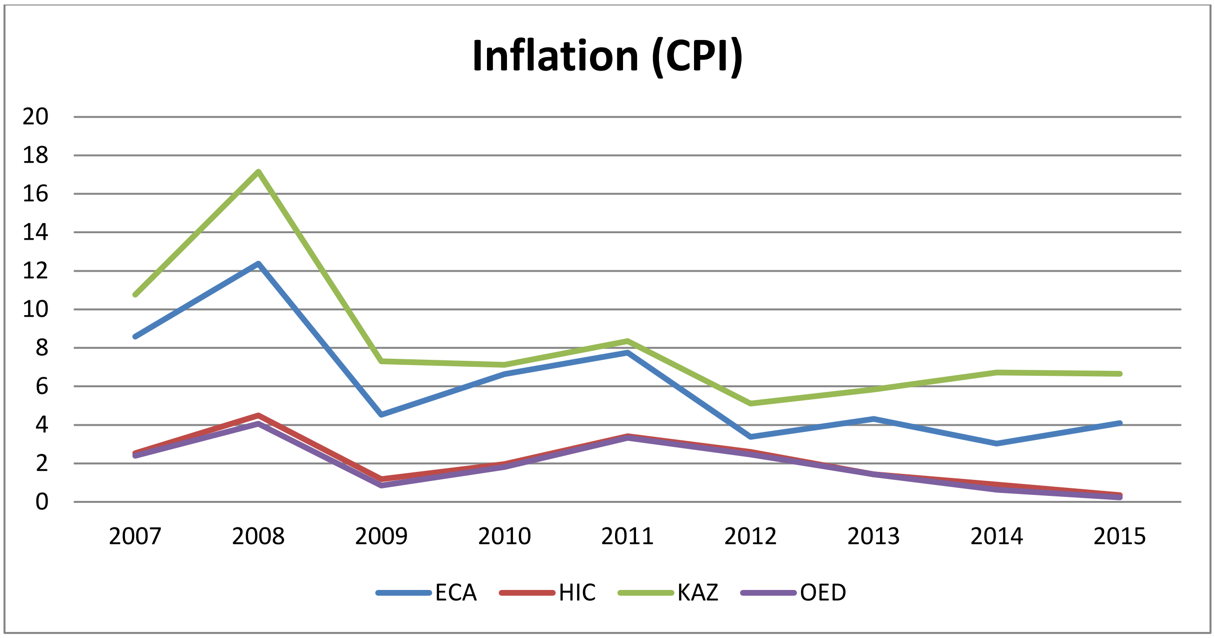
Graph #15 – Stock Market Valuation and GDP



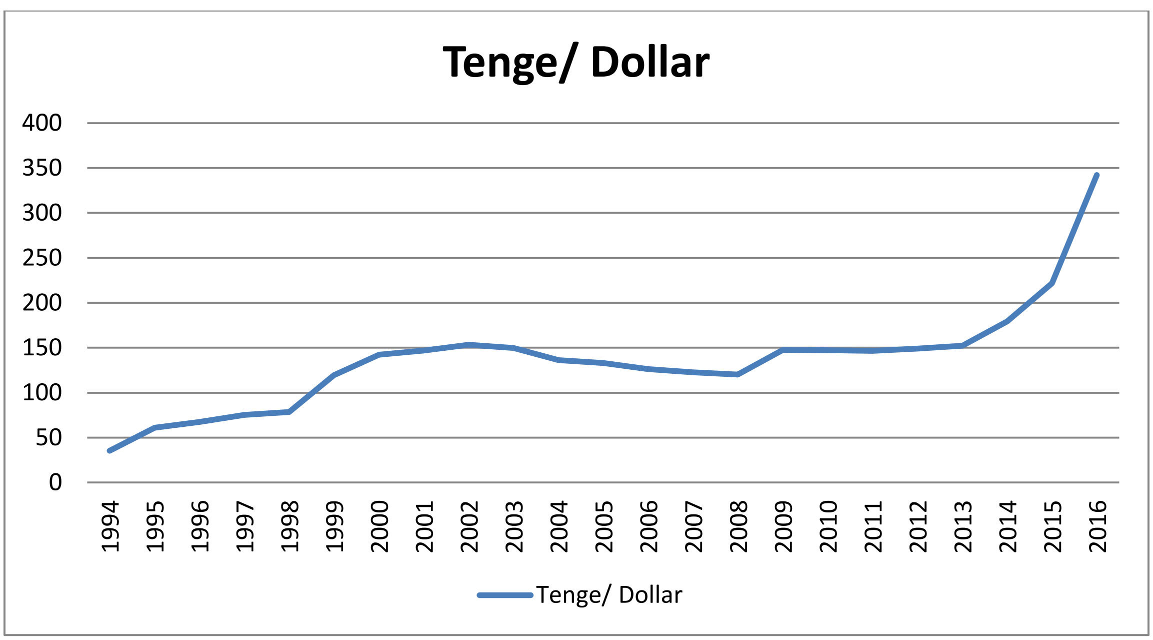
Graph #16 – Inflation from 1996 - 2016



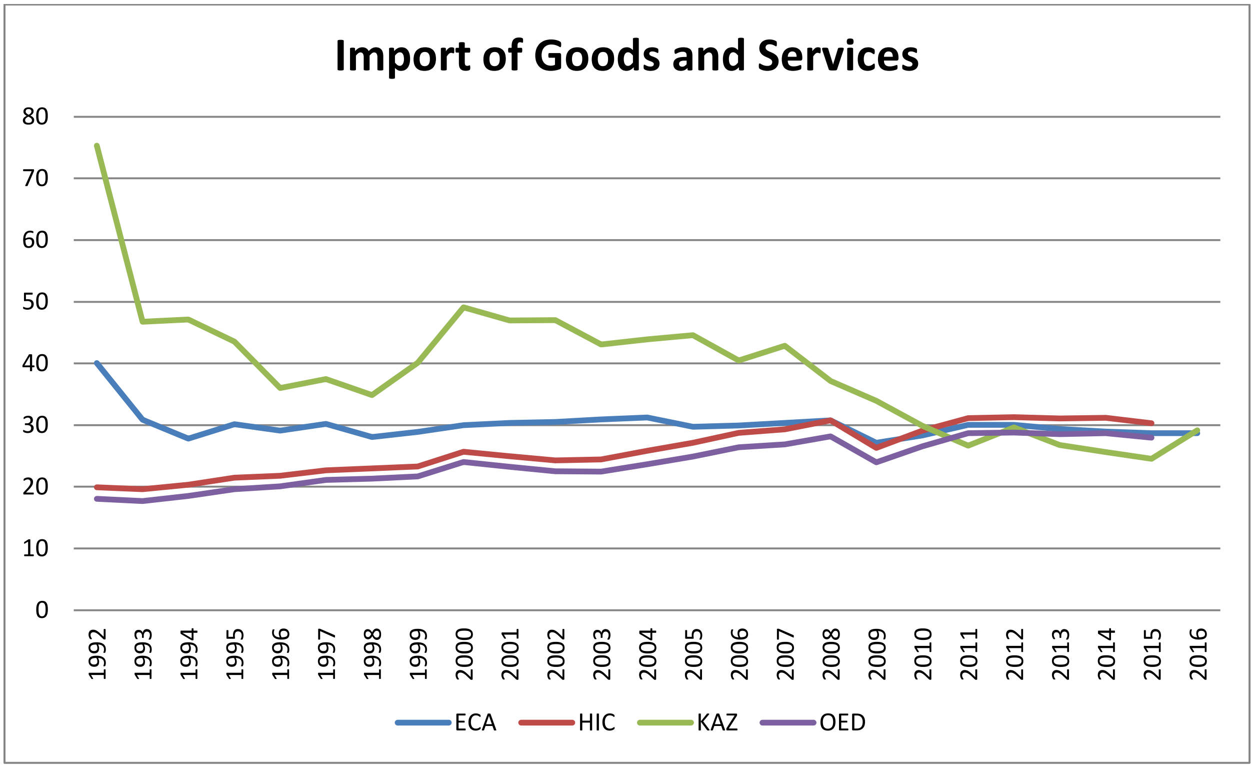
Graph #17 – Inflation from 2010 - 2016



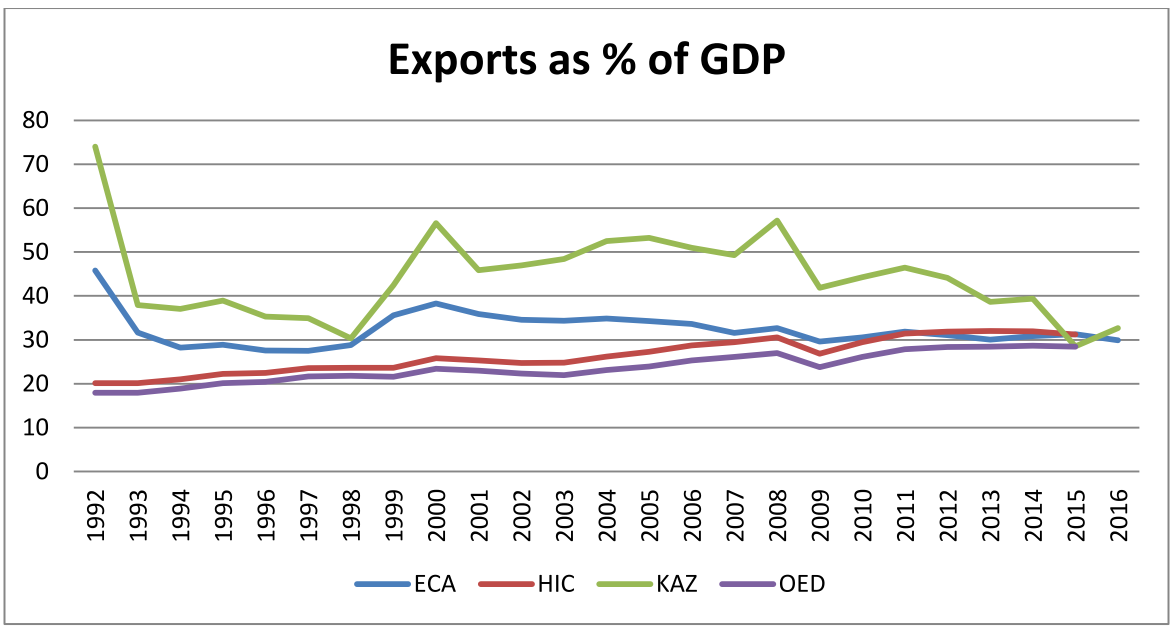
Graph #18 – Tenge – Dollar Conversion Rate



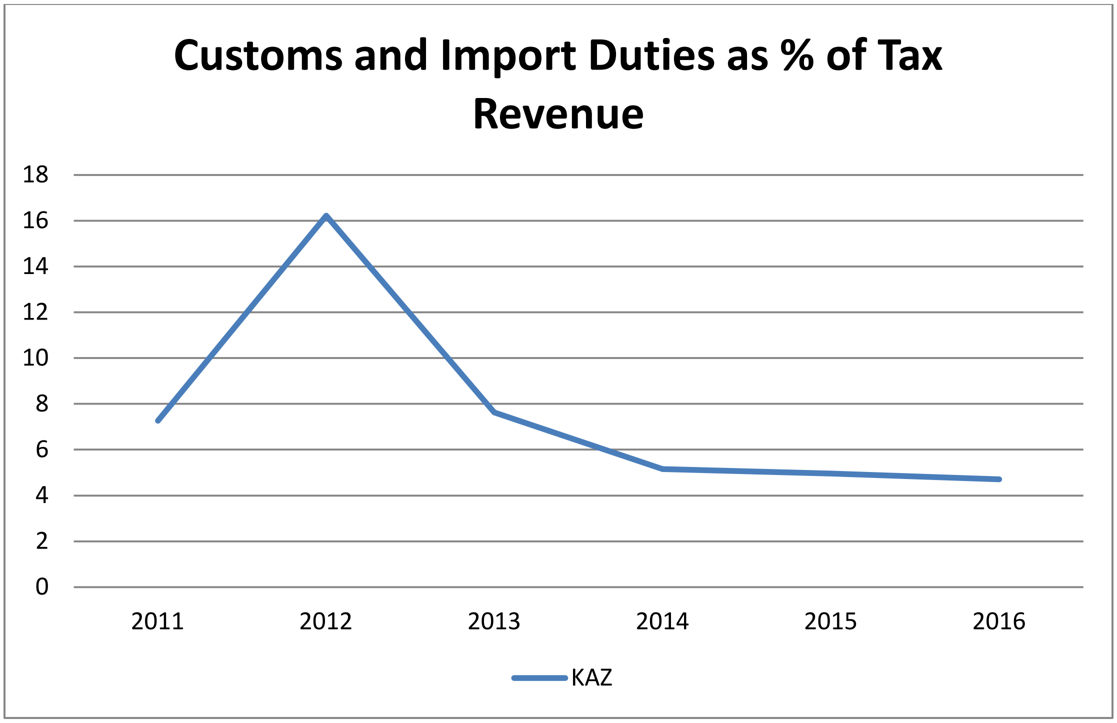
Graph #19 – Import of Goods and Services



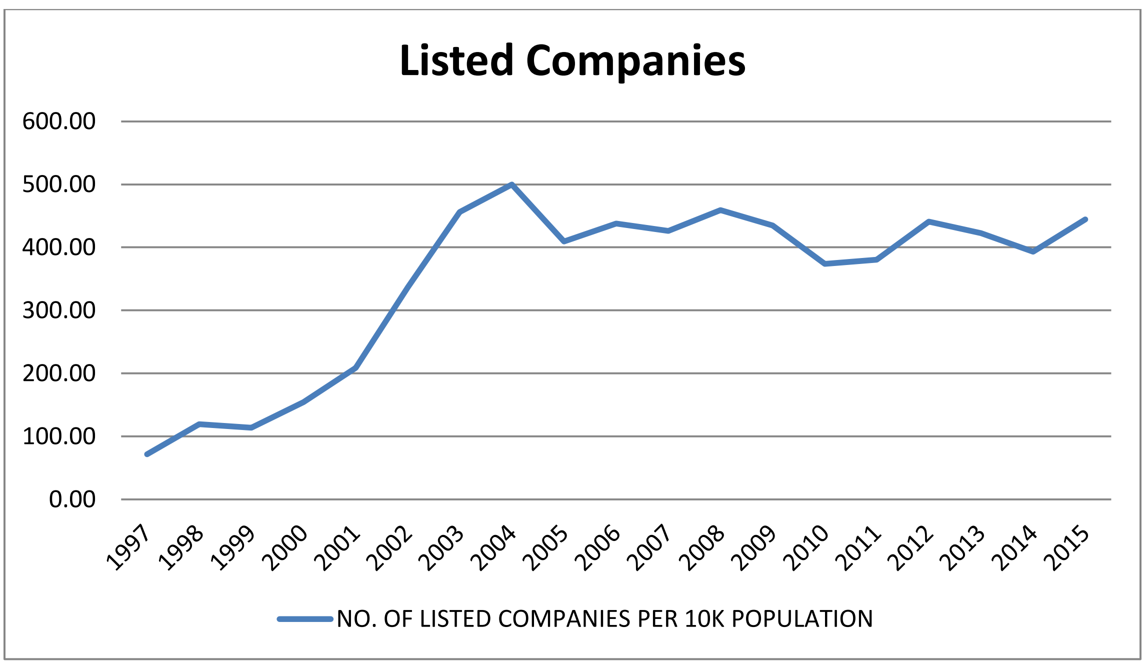
Graph #20 – Exports and GDP



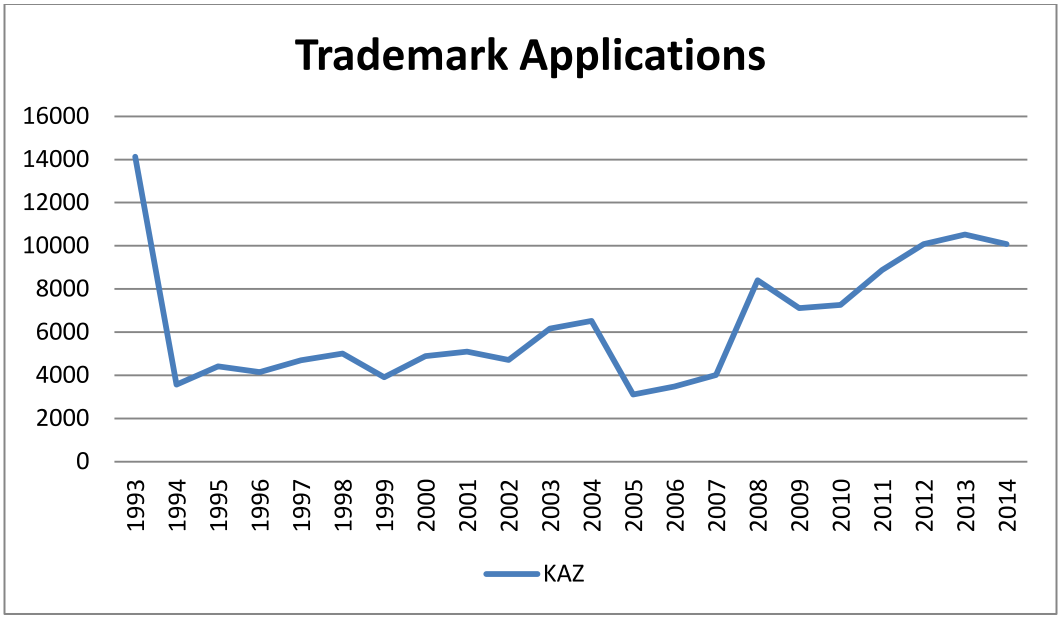
Graph #21 – Customs and Tax Revenue



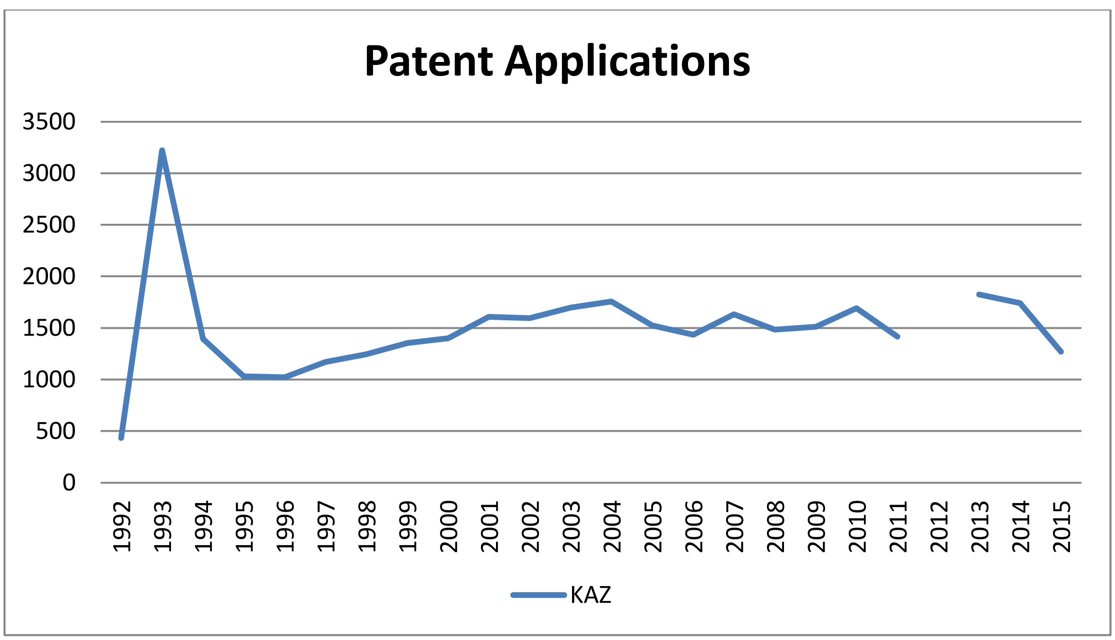
Graph #22 – Listed Companies



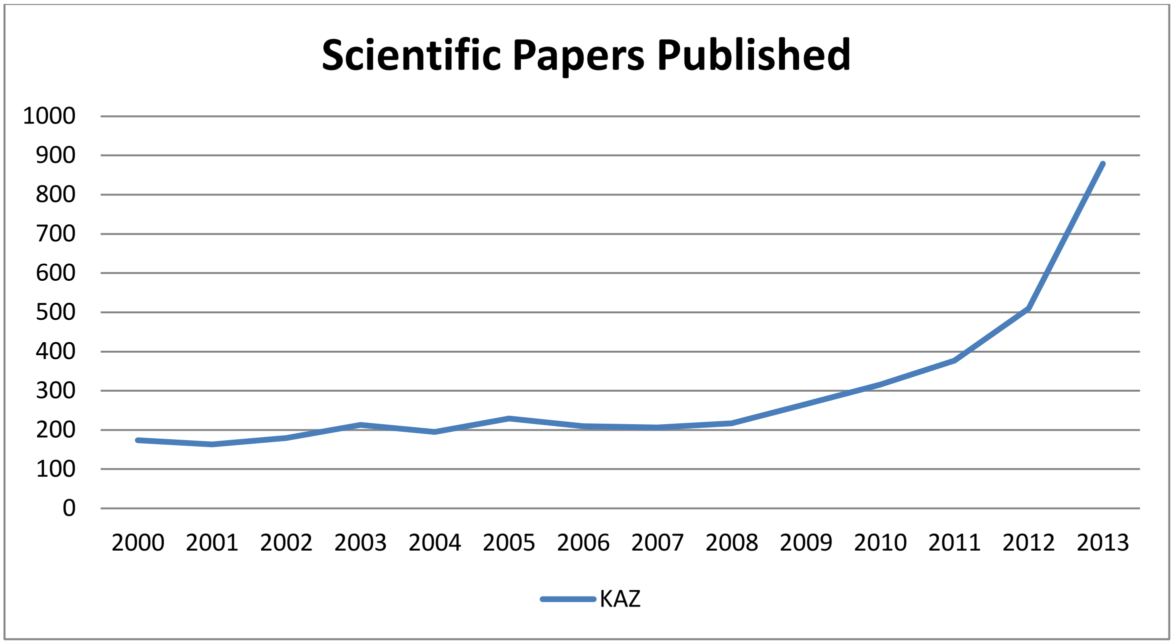
Graph #23 – Trademark Applications



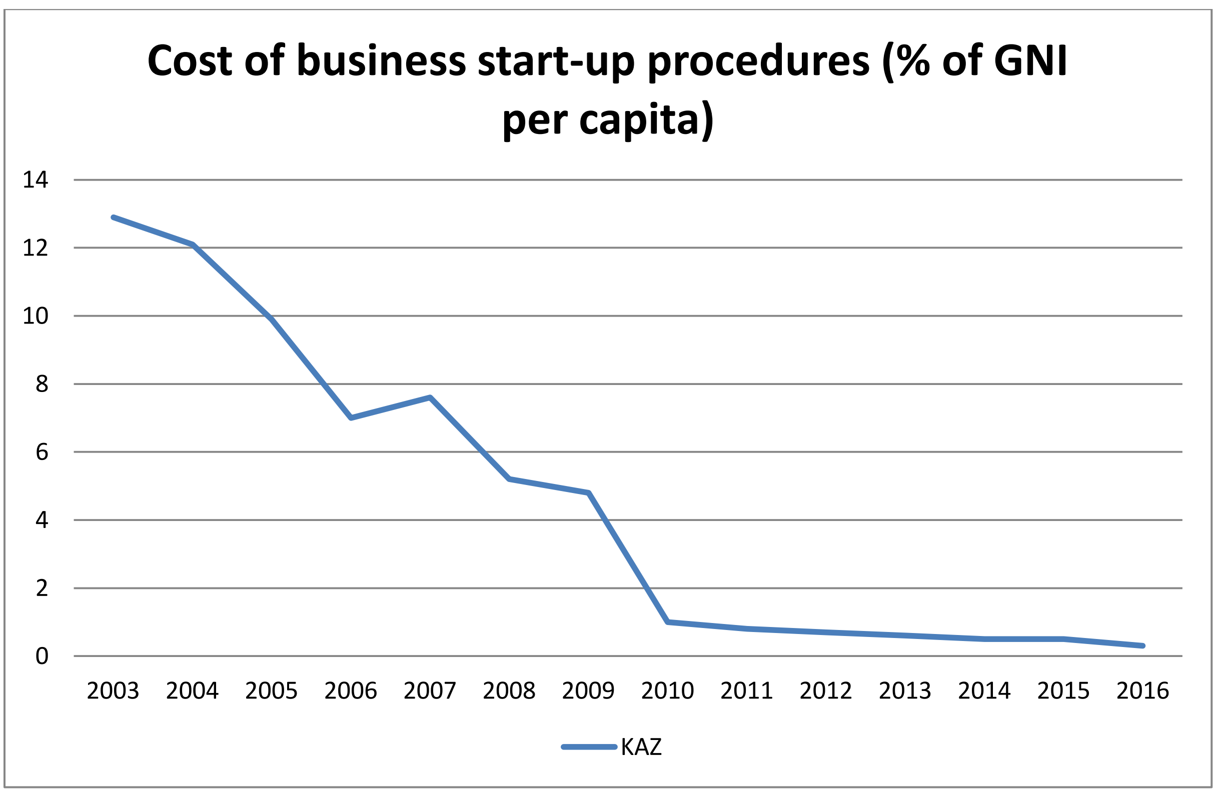
Graph #24 – Patent Applications



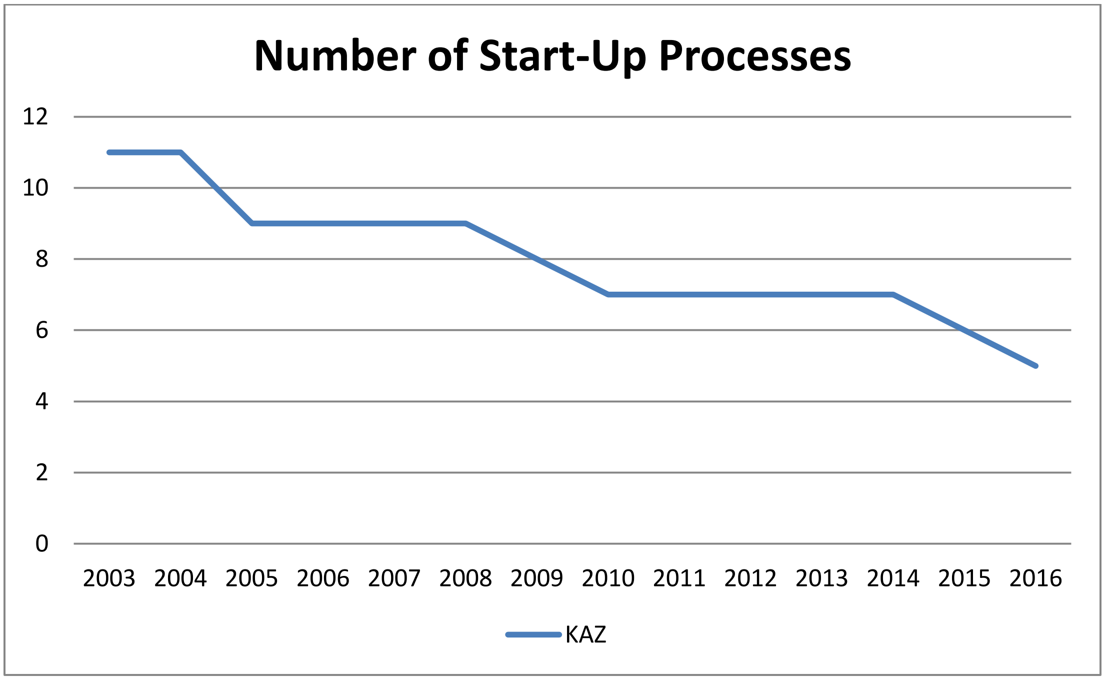
Graph #25 – Scientific Papers Published



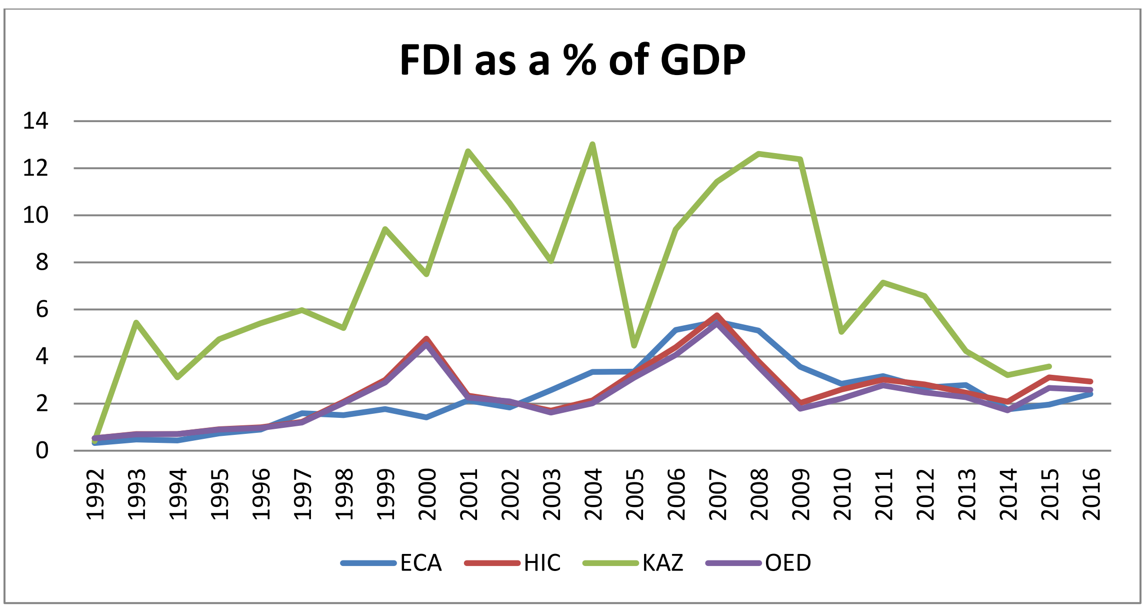
Graph #26 – Cost of Opening a Business



Graph #27 – Number of Start-up Processes

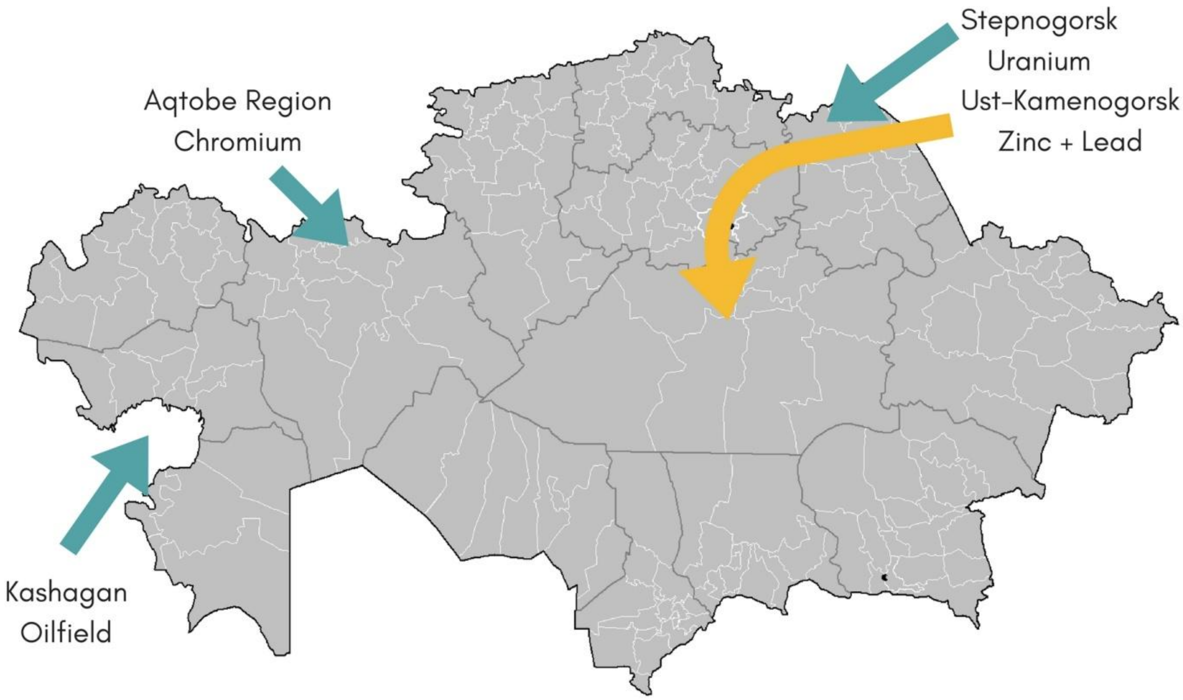


Graph #28 – FDI and GDP



Maps

Map #1 – Natural Resources of Kazakhstan



(Picture courtesy: sharemap.org. All edits are owned by the author)

Glossary

KAZ – Kazakhstan

HIC – High Income Countries

OECD – Organization of Economic and Cooperation and Development

ECA – Europe and Central Asia (excluding High Income Nations)

In order to make analyses more meaningful, I used three reference groups. The reason for selecting the same have been listed below –

1) HIC – The World Bank currently classifies Kazakhstan as a 'Upper Middle Income Country', therefore the logical progression upward would be to progress to being a High Income Country. It is the adjacent cohort of countries.
2) OECD – A 35 nation collective, the OECD are a group of financially sound, highly developed countries. They are uber exclusive, and admission is a fairly elaborate process. Selecting these countries was prohibited for this project, thus justifying the reference group tag.
3) ECA – This is a group of countries within which Kazakhstan fits perfectly. It is the group of European and Central Asian Countries minus the HICs. This includes several former Soviet Union countries. It is a group of countries with similar financial characteristics as Kazakhstan, and thus makes for an interesting comparison.

PPPs – Public-private partnerships

BoT – Build-Operate Transfer

CAREC – Central Asian Region of Economic Cooperation

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