

Independence and Transparency of the Central Bank of Kazakhstan

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Abstract

During the last two decades the idea that central bank independence and transparency helps to maintain price stability, became popular among economists and central bankers. Many countries' governments give their monetary authorities higher independence and transparency to achieve the price stability goal. However, emerging countries such as Kazakhstan, suffer from high inflation. This inflation occurs largely due to a low level of independence and transparency of central banks. This research project measures the current level of independence and transparency of central bank of Kazakhstan. Indices were used to measure central bank independence and transparency. Central bank independence was measured by two types of indices: based on central bank laws (legal independence) and based on central banks governor's turnover (TOR). Developing countries have a weak legal framework, implying that a legal independence index cannot be appropriate to use as a measures of actual independence. Therefore, by paying attention to the other two indices, we can say that the central bank of Kazakhstan has a low level of independence and transparency. This, in turn, can be one of the causes of high inflation in Kazakhstan.

Keywords: Kazakhstan, Central bank, Legal independence, Transparency, Central banks governor's turnover.

JEL Classification Codes: E52, E58.

1. Introduction

In his research, Fischer (1996), noted that long run price stability should be the main goal of a central bank, and he stated that there also can be some secondary goals of a central bank, such as full employment and output growth. However, Fischer (1996) also pointed out that price stability remains the dominant

goal in case of conflict among goals. This idea is popular among economists and central bankers (Fischer, 1996; Goodfriend & King, 2000; Bernanke, 2006), and the popularity stems from the desire to eliminate the costs of inflation, that held economy from sustainable growth (Dotsey & Ireland, 1994). Due to severity of inflation costs, for an economy it is advantageous if a central bank maintains price stability. At the same time, over the past two decades, another idea was developed and became popular among economists and central bankers. This idea states that one of the main factors contributing to price stability is independence and transparency of a central bank (Rogoff, 1983). The idea of price stability is popular, and as a result, in order to maintain price stability, governments strive to improve independence and transparency of their central banks.

The idea of the central bank independence (CBI) derives from time inconsistency of monetary policy. The time inconsistency theory was developed by Kydland and Prescott (1977), Barro and Gordon (1983), where it is stated that time inconsistency of monetary policy emerges when government commits to generate economic growth, maintain low unemployment and price stability. For example, in some cases (economic slowdown, the election period), the government may renege some of their commitment, and will prefer economic growth or low unemployment rather than price stability. There is a solution for the time inconsistency problem. Governments should allow central banks to stick to the price stability commitment by making them independent from their pressure. As a result, central banks can maintain low and stable inflation, despite the situation in other government commitment. Therefore, it is important to improve central bank independence in order to maintain price stability.

The independence of a central bank does not mean necessarily full independence from the government. According to the DeBelle and Fischer (1994), there are 2 types of central bank monetary independence. The first is goal independence, where central bank can choose the monetary policy goal independently. In that case, central bank is more independent, but the goal independence can be chosen when central bank has an institutionally strong research base, to properly choose the right monetary goals. The second is the instrument independence, where government sets monetary policy goals, but central bank has competence to choose instruments to maintain the goals set by the government. There are some reasons to

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improve Central bank transparency (CBT). Today, when central banks are more independent, transparency is an important mechanism that allows the public to monitor whether the actions of an independent central bank are legitimate. In addition, CBT is a part of global movement for transparency in government authorities, which has increased significantly in the last 20 years. These reasons of transparency are more political, but there is also an economical aspect. Geraats (2002) in his research argued that one of the positive aspects of CBT is absence of asymmetric information. When the central bank has a transparent monetary policy, economic agents can provide more accurate economic planning, and be prepared for changes in monetary policy.

Despite the fact that many economists believe that independence and transparency of central bank are good for price stability, there are many countries having monetary authorities that highly dependent on the government. In most cases, they are emerging countries, and the price stability and stability of financial sector is often an acute problem in these countries. At the 2nd section of the paper I will define the aim of the paper. Subsequently in section 3, I will define hypotheses and methodologies to measure central bank independence and transparency. In section 4, I will discuss the results of my measurement and finally, section 5 concludes.

2. Aim of the Paper

Kazakhstan is an emerging country and suffering from high inflation and financial instability, despite the fact that de jure, the main objective of the central bank of Kazakhstan is price stability. According to the information from National bank of Republic of Kazakhstan (Central bank of Kazakhstan), Kazakhstan has an average inflation of 8.01% for the last 15 years, whereas according to the information from IMF, average inflation in Advanced economies is 1.95%, in Emerging markets and developing economies is 6.63% (for detailed information see Table 1).

<Table 1> Average Inflation

Percent change	Kazakhstan	Advanced economies	Emerging market and developing economies
2000	9,8	2,5	8
2001	6,4	1,4	7,3
2002	6,6	2,1	7,2
2003	6,8	1,6	6,3
2004	6,7	2,4	6,2
2005	7,6	2,5	6
2006	8,4	1,9	6,3
2007	18,8	3,1	7,8
2008	9,5	1,6	7,8
2009	6,2	1,1	5,4

2010	7,8	1,8	6,8
2011	7,4	2,7	6,9
2012	6	1,7	6,1
2013	4,8	1,2	5,5
2014	7,4	1,7	5,7
Average inflation	8,01	1,95	6,63

Source: National Bank of Kazakhstan & International Monetary Fund.

There are several reasons of high inflation in Kazakhstan, which the Central Bank of Kazakhstan have to combat in order to maintain price stability. Are all of the reasons unavoidable (for example: imported inflation) or there are some of the reasons that can be handled? The main objective of Central bank of Kazakhstan is to maintain price stability, but de facto, is the price stability the main objective? Kazakhstan is an emerging economy, and as it is inherent for emerging economies, Kazakhstan has bad law pursuance and the law is not always respected. The objective of central bank of Kazakhstan to maintain price stability may not be performed because, central bank with low independence can choose to perform government objectives rather than price stability objective. Because low transparency, the central bank has no legal obligations to explain contradictions in the objectives before public. We can assume that one of the reasons of the high inflation is low independence and transparency of the central bank of Kazakhstan, and the aim of the paper is to understand how truly central bank of Kazakhstan is independent and transparent.

3. Measures of Central Bank Independence and Transparency

Based on the information above, we can hypothesize that the Central Bank of Kazakhstan has low levels of independence and transparency. I am going to test the hypothesis by the indices developed by Cukierman, Webb and Neyapti (1992) and Crowe and Meade (2007) that allow us to measure CBI and CBT respectively. There are other indexes to measure central bank independence and transparency. For example, Eijffinger and Geraats (2006) designed a methodology to measure central bank transparency and Grilli, Masciandaro and Tabellini (1991) and Debelle and Fischer (1994) developed a methodology to measure central bank independence. Cukierman et al. (1992) developed two kinds of indexes of central bank independence. First, there is a Legal Independence Index, measured based on the laws of the central bank. This method of measuring the independence of the bank is the most common. Many researchers have attempted to assess the independence of the central bank on the basis of legislation (Bade & Parkin, 1983; Grilli et al., 1991). The reason of popularity of the method is that legal independence that is established in law is a basic and required attribute for central bank independence and can be measured by referring to the articles of the law.

The legal independence index is divided into 4 weighted clusters (Independence of Central bank CEO, Policy formulation, Central bank objectives, Limitations on lending to the government), which contain 16 variables (for detailed information see Appendix Table 4) that scored in the range from 0 to 1 point. In the index, scale 0 means lowest level of independence, and 1 means highest level. In some cases, independence measured using legal basis does not show actual CBI. Cukierman (1992), Sikken and Haan (1998) in their papers noted that in emerging economies, because of bad law enforcement, legal CBI may be higher than actual CBI. On the other hand, in advanced economies, legal CBI corresponds with actual CBI.

Legislations of countries are not identical, implying that the calculation of legal independence depends on how laws are interpreted. Hence, Cukierman et al. (1992) developed another index to measure actual CBI in emerging countries more precisely. They used the rate of turnover of central bank governors (TOR) to measure actual CBI in emerging markets. The index is based on the assumption that if central bank governor would have high turnover, then the governor will be more susceptible for government decisions. Central bank governor that knows that the government can easily appoint another governor, who, in order to safeguard his position, will not oppose the government's decision, even if the decision conflicts with the main goal of the central bank. TOR index is measured as an average of governors' change per year. Lower value of the TOR index shows higher CBI.

There are several methods of measuring the CBT. Eijffinger and Geraats (2006) developed one of the methods. They distinguished several categories of the central bank transparency: political transparency, economic transparency, procedural transparency, policy transparency, operational transparency. Crowe and Meade (2007) slightly modified their method of assessing the central bank's transparency, as the method of evaluation for the 3 questions in each category of Eijffinger and Geraats (2006). While the new method of the 2 questions in each category, end each answer to the question is scored from 0 to 1 point (see Appendix Table 5). The transparency index is the average of all questions from each category, and 0 mean lowest degree of transparency and 1 highest degree.

4. Results

I measured independence using Cukierman et al. (1992) legal independence index. Legal independence of the central bank of Kazakhstan, measured by this method, is 0.71. According to the calculations by Crowe and Meade (2008) (see Table 2), 44% of the emerging economies are at the level of $0.4 > x < 0.6$, a level typical for developing countries, and Kazakhstan has a somewhat higher level. Kazakhstan is at the $0.6 > x < 0.8$ range. According to the Crowe and Meade (2008) calculations, 26% of the emerging countries are concentrated in that range. In the same research, Crowe and Meade (2008) showed that 7.7% of the developed countries are at the level of $0.6 > x < 0.8$, while

50% of developed countries at the level greater than 0.8, whereas 21% of the emerging economies are at the level.

Bodea (2013) in the research shows that in 1993 legal independence of the central bank of the Kazakhstan was 0.31, measured by Cukierman et al. (1992) legal independence index, and in 2002, legal independence was 0.42 and now, legal independence is 0.71. This data shows that central bank of Kazakhstan notably improved its legal independence.

My calculation, along with Crowe and Meade (2008) calculations, shows that the central bank of Kazakhstan has a comparatively higher level of legal independence. But the calculations contradict with the theory that assumes that CBI is the one of the reasons of price stability. As I showed in section 2, Kazakhstan has a higher level of inflation than in other emerging countries, and the theory says that with a higher level of independence, Kazakhstan should have a lower level of inflation.

<Table 2> Legal Independence

	Advanced countries		Emerging market and developing countries	
		in %		in %
$x < 0.2$	1	3,8%	0	0,0%
$0.2 < x < 0.4$	7	26,9%	6	8,6%
$0.4 < x < 0.6$	3	11,5%	31	44,3%
$0.6 < x < 0.8$	2	7,7%	18	25,7%
$x < 0.8$	13	50,0%	15	21,4%
Total	26	100%	70	100%

Source: Data from Crowe and Meade (2007) calculations

Note: Advanced Economies: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, United Kingdom, United States

Emerging Market and Developing Economies: Argentina, Bahamas, Barbados, Bolivia, Botswana, Brazil, Chile, China, Colombia, Congo, Costa Rica, Egypt, Ethiopia, Ghana, Honduras, Hungary, India, Indonesia, Kenya, Lebanon, Malaysia, Malta, Mexico, Morocco, Nepal, Nicaragua, Nigeria, Pakistan, Peru, Philippines, Poland, Qatar, Romania, Serbia, South Africa, Tanzania, Thailand, Turkey, Uganda, Uruguay, Venezuela, Zambia, Zimbabwe, Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Ecuador, El Salvador, Estonia, Guatemala, Jamaica, Kazakhstan, Kuwait, Latvia, Lithuania, Macedonia, Namibia, Oman, Paraguay, Russia, Slovakia, Slovenia, Sri Lanka, Trinidad and Tobago, Tunisia, Turkmenistan, United Arab Emirates

As I mentioned above, in some cases, legal CBI does not show actual CBI in the emerging markets. I also measured CBI by TOR index. Actual independence, measured by TOR index is 0.32. The index implies that, on average, central bank governor changes in every 3.1 years, but according to the law on the National Bank of the Republic of Kazakhstan, the office of central bank governors has a term of 6 years. Crowe and Meade (2007) in their research showed that Turnover of Central Bank Governors in emerging countries is 0.21 meaning that governors of central banks in the emerging countries change in every 4.8 years. In advanced economies, turnover of central bank gover-

nors is a little bit better than in emerging countries, being 0.19 or 5.26 years. Central bank of Kazakhstan has a higher TOR index than in other emerging markets. Higher TOR index means that the governor of the central bank of Kazakhstan changes more often than governors of a central bank in other emerging markets, implying a lower level of independence.

The result that we got from TOR index does not correspond with the result that we obtained from the Legal Independence Index. The difference between the indices is significant, The legal independence index shows that central bank of Kazakhstan is more independent than central banks in other emerging and developing countries, while the TOR index suggests that Kazakhstan has a independence lower than in other emerging countries. High level of legal independence shows that the legislative framework of central bank independence is good enough, but since Kazakhstan is an emerging country and a good legislative framework cannot ensure high actual independence, because of a lack of law enforcement. That kind of situation cannot guarantee that central bank would make independent decisions, because the future work position of the governor is dependent on the government, and the governor, to safeguard his position, would prefer to follow the government decisions and objectives, instead of maintaining price stability. In Kazakhstan, the issue is very serious, since the governor of central bank in Kazakhstan is accountable to the President of Kazakhstan, and the President of the Kazakhstan solely appoints and dismisses the governor.

Kazakhstan is an emerging market, so we can conclude that to measure independence central bank of Kazakhstan, it will be more accurate to use the TOR index. According to calculations obtained by the index, we can conclude that the central bank of Kazakhstan is less independent than other Emerging market and developing countries. According to the time inconsistency theory, low level of CBI in Kazakhstan can be a cause of low level of price stability and financial instability.

<Table 3> Transparency

	Number of countries	Transparency Scores
All countries	37	0,61
Advanced countries	24	0,64
Emerging market and developing countries	13	0,54
Kazakhstan	1	0,45

Source: Data from Crowe and Meade (2007) calculations

Note: Advanced Economies: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, United Kingdom, United States

Emerging Market and Developing Economies: Argentina, Brazil, China, Czech Republic, Hungary, India, Indonesia, Mexico, Poland, Russia, Slovakia, Slovenia, South Africa, Turkey

The requirement for transparency of the central bank increases with increasing independence, since independence requires greater accountability and transparency. Kazakhstan has

a low level of CBI, and on this basis there is no need for central bank of Kazakhstan to be more transparent. CBT of the Kazakhstan measured by the method of Crowe and Meade is 0.45. The figure is low. For example, emerging market and developing countries transparency index is 0.54. Emerging market and developing countries transparency have a higher level of CBI measured by TOR (see Table 3). According to the Crowe and Meade transparency of the advanced economies is 0.64, higher than in emerging market and developing countries and in Kazakhstan.

Measuring CBT by the Crowe and Meade index shows that the central bank of Kazakhstan has a lower level of CBT than in other emerging market and developing countries. Kazakhstan surely has a low level of CBT, as shown by many factors. For example, Central bank of Kazakhstan does not provide information about its intervention in open market operations or about its future visions of the markets. Low level of transparency adversely affects its economic agents. In Kazakhstan, due to a low level of transparency, economic agents do not believe in national currency, which leads to a high level of dollarization of the economy and higher financial instability. The result of the research answers of the research question. By using the TOR index I conclude that central bank of Kazakhstan has low level of independence and by using the Crowe and Meade index I conclude that central bank also has low level of transparency.

5. Conclusion

In this paper, I measured independence and transparency level of the central bank of Kazakhstan, and compared it with the Crowe and Meade independence and transparency data. To measure CBI, I used 2 indices. Indices shows different results, independence of central bank of Kazakhstan measured by legal independence index is comparatively higher than CBI measured by TOR index. High level of legal independence means that Central bank of Kazakhstan has satisfactory level of law framework. Emerging markets in most cases has a low level of enforcement of the law, and because of that, legal independence in emerging countries sometimes does not show real situation of central bank independence. CBI measured by TOR index shows that the level of CBI of Kazakhstan is lower than average CBI in developed countries and even lower than average CBI in emerging market and developing countries. To some extent, Central bank transparency depends from central bank independence. Kazakhstan has a low level of CBI and as it was expected Kazakhstan has low level of CBT according to the result that I obtain by using index developed by Crowe and Meade (2007).

The results of the research support hypothesis that I assumed in section 3. Central bank of Kazakhstan has a low level of transparency and independence, and as CBT and CBI is one of the factors contributing to price stability, and to maintain price stability, the government of Kazakhstan should improve central

bank independence and transparency. Increasing CBI and CBT will improve the situation, but we have to keep in mind that high CBT and CBI are not the only factors that should be taken into consideration, other political and economic issues (for example, fiscal policy, external factors such as oil price shocks, etc.) also play a significant role.

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Appendix

<Table 4> Legal Central Bank Independence

	Description of variable, weight	Coding	Points
Chief executive officer (CEO)	Weight: 0,2		
a. Term of office			
	Over 8 years	1	
	6 to 8 years	0,75	0,75
	5 years	0,5	
	4 years	0,25	
	Under 4 years or at the discretion of appointer	0	
b. Who appoints CEO?			
	Board of central bank	1	
	A council of the central bank board, executive branch, and legislative branch	0,75	
	Legislature	0,5	
	Executive collectively (e.g. council of ministers)	0,25	
	One or two members of the executive branch	0	0
c. Dismissal			
	No provision for dismissal	1	
	Only for reasons not related to policy	0,83	
	At the discretion of central bank board	0,67	
	At legislature's discretion	0,5	
	Unconditional dismissal possible by legislature	0,33	
	At executive's discretion	0,17	0,17
	Unconditional dismissal possible by executive	0	
d. May CEO hold other offices in government?			
	No	1	
	Only with permission of the executive branch	0,5	
	No rule against CEO holding another office	0	0
Policy formulation	Weight: 0,15		
a. Who formulates monetary			0,13

policy?			
	Bank alone	1	1
	Bank participates, but has little influence	0,67	
	Bank only advises government	0,33	
	Bank has no say	0	
b. Who has final word in resolution of conflict?			
	The bank, on issues clearly defined in the law as its objectives	1	
	Government, on policy issues not clearly defined as the bank's goals or in case of conflict within the bank	0,8	
	A council of the central bank, executive branch, and legislative branch	0,6	0,6
	The legislature, on policy issues	0,4	
	The executive branch on policy issues, subject to due process and possible protest by the bank	0,2	
	The executive branch has unconditional priority	0	
c. Role in the government's budgetary process			
	Central bank active	1	1
	Central bank has no influence	0	
Objectives	Weight: 0,15		0,06
	Price stability is the major or only objective in the charter, and the central bank has the final word in case of conflict with other government objectives	1	
	Price stability is the only objective	0,8	
	Price stability is one goal, with other compatible objectives, such as a stable banking system	0,6	
	Price stability is one goal, with potentially conflicting objectives, such as full employment	0,4	0,4
	No objectives stated in the bank charter	0,2	
	Stated objectives do not include price stability	0	
Limitations on lending to the government			
a. Advances (limitation on nonsecuritized lending)	Weight: 0,16		0,16
	No advances permitted	1	1

	Advances permitted, but with strict limits (e.g., up to 15 percent of government revenue)	0,67	
	Advances permitted, and the limits are loose (e.g., over 15 percent of government revenue)	0,33	
	No legal limits on lending	0	
b. Securitized lending	Weight: 0,11		0,11
	Not permitted	1	1
	Permitted, but with strict limits (e.g., up to 15 percent of government revenue)	0,67	
	Permitted, and the limits are loose (e.g., over 15 percent of government revenue)	0,33	
	No legal limits on lending	0	
c. Terms of lending (maturity, interest, amount)	Weight: 0,11		0,11
	Controlled by the bank	1	1
	Specified by the bank charter	0,67	
	Agreed between the central bank and executive	0,33	
	Decided by the executive branch alone	0	
d. Potential borrowers from the bank	Weight: 0,058		0
	Only the central government	1	0
	All levels of government (state as well as central)	0,67	
	Those mentioned above and public enterprises	0,33	
	Public and private sector	0	
e. Limits on central bank lending defined in			
	Currency amounts	1	
	Shares of central bank demand liabilities or capital	0,67	
	Shares of government revenue	0,33	
	Shares of government expenditures	0	
f. Maturity of loans			
	Within 6 months	1	
	Within 1 year	0,67	
	More than 1 year	0,33	
	No mention of maturity in the law	0	

g. Interest rates on loans must be	Weight: 0,03		0,0167
	Above minimum rates	1	
	At market rates	0,75	0,5
	Below maximum rates	0,5	
	Interest rate is not mentioned	0,25	
	No interest on government borrowing from the central bank	0	
h. Central bank prohibited from buying or selling government securities in the primary market?	Weight: 0,03		0,03
	Yes	1	1
	No	0	
	Legal Central Bank Independence		0,71

Note: Data for variables "Limits on central bank lending defined in" and "Maturity of loans" are not available. Their weight is proportionally allocated among the "Limitations on lending to the government" cluster's variables.

<Table 5> Central Bank Transparency

Transparency Measure			Points
(1) Political			
	1.1: Is there a statutory objective?		
		1: Single objective of price stability or price stability objective does not conflict with other objectives	1
		.5: Price stability objective potentially conflicts with other objectives	0.5
		0: Objectives do not include price stability or there is no objective	0
	1.2: Is there an explicit numerical target for prices or inflation?		
		1: Yes	1
		0: No	0
(2) Economic			

	2.1: Does the central bank publish surveys (conducted by itself or others) that could be used to estimate inflation expectations	1: Yes	1
		0: No	0
	2.2: Does the central bank publish any forward-looking analyses such as forecasts?		
		1: Words AND numbers/figures	1
		.5: Words OR numbers/figures	0.5
		0: Neither	0
(3) Procedural			
	3.1: Does the central bank publish minutes of policy meetings?	1: Yes	1
		0: No	0
	3.2: Does the central bank publish voting patterns of the monetary policy committee?	1: Yes	1
		0: No	0
(4) Policy			
	4.1: Does the central bank publish explanations on the same day that policy changes?	1: Yes	1
		0: No	0
	4.2: Does the central bank publish an explanation on its meeting days even when there is no change in policy?	1: Yes	1
		0: No	0
(5) Operational			
	5.1: Does the central bank publish discussion of risks to the outlook or forecast?	1: Words AND numbers/figures	1
		.5: Words OR numbers/figures	0.5
		0: Neither	0
	5.2: Does the central bank publish discussion of shocks or forecast errors after the fact?	1: Yes	1
		0: No	0
			0.55