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Governance, Institutional Quality and the Euro Area Crisis: What Lessons to East Asian Integration?*

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We find that institutional quality of an individual country was highly and significantly correlated with its economic performance in the euro area. We argue that governance reforms proposed at present do not suffice to resolving the fundamental problems of the EMU governance system unless disparities of institutional quality in member states are dissolved. Regarding regional integration, East Asia is far behind the Eurozone not only in institutional elements of the governance system but also in institutional quality at the level of individual nations.

Keywords: Governance, Euro Area, Debt Crisis, Institutional Quality JEL Classification: F30, F33

1. Introduction

Ever since the euro area crisis began in 2009, various reforms of economic governance system have been in progress. Almost all proposals for the reform of EMU governance have been aiming for strengthening fiscal and budgetary austerity and implementing the 'monetarist' view that emphasized a strong institutional framework. In addition, a new governance system such as banking

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- ¹ See Eichengreen (2007), Hallerber et al. (2007), Constâncio (2010), Grindle (2011) and Schuknecht et al. (2011) for proposals of governance reforms in the euro area.

and fiscal union has been proposed, but not activated.

However, there are several issues to be further explored in the process of triggering structural reforms of EMU governance. The first issue is to what extent the euro states and other members of the EU should deal with conflicts between the pro-Europeans and euro-sceptics, both at national and European levels. The pressure to reconcile these conflicts in reshaping the governance architecture in the euro area is intense, fuelled by the euro area crisis. Studies that investigate this issue will inevitably have to deal with political decision making process: how politics affect the choices of governance measures to yield certain economic performance, which could differ from ones that come out from other political choices on governance measures.

The second issue is that structural economic reforms typically taken in a currency union may not be sufficient to narrow growing imbalances and diverging trends in competitiveness, and converge economic cycles within the euro area. For example, the latest revision of fiscal policy governance is simply strengthening fiscal rules of the Stability and Growth Pact (SGP). The new rule demands that the annual structural budget deficit should not exceed 0.5% of nominal GDP, and contains an automatic correction mechanism that is triggered in case of deviation. However, the rule cannot solve the fundamental problems unless the origin of large budget deficits is identified and corrected. More generally, we should explore why economic performance is so different among member states.

In this paper, we explore the data of institutional quality for the second issue. We find that institutional qualities of individual member nations were highly and significantly correlated with their economic performance in the euro area. We conclude that it is important to upgrade institutional quality of individual member nations as well as to narrow its heterogeneity among them.

We also compare the governance system and quality of the euro area members with those of East Asian countries and draw policy implications for a regional integration in East Asia. We find that East Asia is far behind the Eurozone not only in institutional elements of the governance system at a regional level but also in institutional quality at the level of individual nations.

The next section briefly reviews the literature on institutional quality and its relationship with economic performance, and discusses why institutional quality matters for maintaining a single currency area. Section 3 illustrates the data for institutional quality of the euro area member states and explores its close relationship with economic performance. Section 4 examines the data of institutional quality for East Asian countries and discusses policy implications for regional integration

in East Asia. The final section concludes.

2. Why Does Institutional Quality Matter for a Currency Union?

2.1 Institutions and economic performance

North (1990) defines institutions as the rules of the game in a society or more formally as the humanly devised constraints that shape human interactions. In consequence they structure incentives in human exchange, whether political, social, or economic. The major role of institutions in a society is to reduce uncertainty by establishing a stable structure of human interactions. Institutions affect the performance of the economy by their effect on the costs of exchange and production. $(pp. 3-6)^2$

When property rights are not well secured, incentives and opportunities to invest and innovate will be reduced. When corruption is high and rule enforcement is weak, the allocation of resources and fair judgement will be less than desirable. When bureaucracies are cumbersome, the delivery of services such as permits and licenses may be delayed, thereby hampering the process by which technological advances become embodied in new productive processes. Such problems in institutional quality will raise the degree of uncertainty, which boosts transaction costs and thereby negatively affects economic performance.

Previous empirical studies on North's proposition have shown that institutional quality is positively associated with economic performance although causality is not unambiguous. Some important works can be illustrated as follows: Corruption and insecure property rights lower investment and thus economic growth (e.g., Shleifer and Vishny, 1993; Mauro, 1995; Acemoglu, Johnson and Robinson, 2005; de Vaal and Ebben, 2011). Murphy et al. (1993) provide evidence that rent-seeking activities negatively affect long-rung growth. Viera et al. (2012) find that rule of law and investment profiles are also significant determinants for growth. Countries with better institutions have lower inequality (Chong and Caldern, 2000; Chong and Gradstein, 2004; Davis and Hopkins, 2011), better fiscal policy (Akitoby and Stratmann, 2009; Caceres and Kochanova, 2012), more developed financial markets (Chinn and Ito, 2006; Akitoby and Stratmann, 2009), larger capital inflows from abroad (Alfaro et al., 2008; Papaioannou, 2009), less volatile stock prices (Hale et al, 2006), less volatile inflation (Emar, 2012), and better external capital structures (Faria and Mauro, 2009). Political instability leads to higher inflation (Aisen and

² Also see Williamson (2000) for institutions and economic performance.

Veiga, 2005) and larger budget deficits (Roubini and Sachs, 1989). Klein (2005) finds that capital account liberalization enhances growth only for countries with good institutions. On the other hand, some studies find that causality is reversed. For example, institutional quality is caused by growth (Glaeser et al., 2004) and inequality (Chong and Gradstein, 2004).

Regarding European countries, Ekinci et al. (2008) find that the gap exists in the degree of financial integration for northern and southern European countries largely due to the quality of institutions such as expropriation risk, government stability, and law and order. Persistent inflation differentials in the euro area are caused by country specific labor and product market institutions such as collective bargaining system, union density, unemployment protection, and product market regulation (Jaumotte and Morsy, 2012). Using data on actual retail prices for cities in the European region, Schwartz (2012) shows that the failure of the law of one price can be explained not only by border effects but also by institutional quality.

2.2 Optimum currency area (OCA)

Now we discuss why institutional quality is an important factor for maintaining a single currency area. Forming a currency union incurs both benefits and costs for member countries. The source of the costs is the inability to use an independent monetary and exchange rate policy as an instrument of economic adjustment when unexpected macroeconomic disturbances occur. Mundell (1961, 1968), who pioneered the research on OCA, argues that costs will be higher to the extent that disturbances are more asymmetric across economies and speeds of adjustment is lower. Even in this case, costs can be minimized when prices are flexible and labor mobility is high. In reality, however, prices are rigid and labor mobility is limited even in the euro area so that it is essential for member states to face symmetric disturbances to minimize costs from the loss of policy independence.

There have been various attempts to measure asymmetry of disturbances. One is the method of Bayoumi and Prasad (1997) that focuses on the similarity of economic structure among member states. Output disturbances are categorized into three groups: industry-specific, country-specific, and time-specific disturbances. Industry-specific disturbances are unique to each industry regardless of countries, while country-specific disturbances are unique to each country regardless of industries. In contrast, time-specific disturbances are common to all industries and countries in each period. If country-specific disturbances dominate output variations in member states of a currency union and industry-specific or time-specific disturbances are trivial, the states are not likely to share a similar economic structure

and thus to face asymmetric disturbances among them. As discussed above, institutional quality can be the major source of country-specific disturbances. That is, member states will face larger asymmetric disturbances and the loss of policy independence is more costly to the extent that their institutional quality is more heterogeneous.

3. Institutional Quality of Euro Area Members

Despite the disciplinary effects of the EMS which functioned as a convergence mechanism for EU member states, especially in the period of 1986-1992, member states have violated the fiscal rules of the Union even after the launch of the EMU and the performance of the real economy has been sluggish. Some members had larger imbalances in budget and current account, less flexible labour markets, lower competitiveness, lower growth rates, higher unemployment, and so on. Moreover, differences in economic performance between members have been growing over time. Why? Individual member countries have common institutions, but their governance quality (or institutional quality) differs from each other. Economic performance is associated not only with how many of governance measures exist, but with how good they are in its quality as discussed in section 2. In this section, we use the data of individual euro member states and explore how institutional quality is correlated with their economic performance.

As a measure of institutional quality, we use the Worldwide Governance Indicators (WGI) published by the World Bank since 1996, covering over 200 countries. The WGI comprises six governance indicators. The first two indicators (Voice and Accountability; and Political Stability and Absence of Violence/ Terrorism) are related to the process by which governments are selected, monitored and replaced. The second two indicators (Government Effectiveness; and Regulatory Quality) are associated with the capacity of the government to effectively formulate and implement sound policies. The last two indicators (Rule of Law; and Control of Corruption) concern about the respect of citizens and the state for the institutions that govern economic and social interactions among them.

The units in which each of the six governance indicators are measured follow a normal distribution with a mean of zero and a standard deviation of one in each period. This implies that virtually all scores lie between -2.5 and 2.5, with higher scores corresponding to better institutional quality.

Table 1. Institutional quality (euro area)

	AUT	BEL	FRA	DEU	ITA	LUX	NLD	FIN	GRC
					1998				
Voice/accountability	1.42	1.36	1.11	1.34	1.06	1.48	1.61	1.49	1.11
Political stability	1.12	1.02	0.7	1.19	1.1	1.3	1.49	1.38	0.58
Government effectiveness	1.86	1.82	1.55	1.92	0.87	2.03	2.09	2.07	0.71
Regulatory quality	1.39	1.03	0.87	1.28	0.77	1.51	1.9	1.81	0.67
Rule of law	1.85	1.18	1.36	1.62	0.75	1.81	1.76	1.98	0.7
Control of corruption	2.07	1.32	1.4	2.16	0.52	1.98	2.27	2.37	1.06
Composite	9.69	7.74	7	9.51	5.07	10.1	11.11	11.1	4.82
					2011				
Voice/accountability	1.41	1.40	1.20	1.31	0.94	1.57	1.52	1.54	0.82
Political stability	1.19	0.88	0.61	0.86	0.59	1.33	1.12	1.38	-0.06
Government effectiveness	1.66	1.67	1.36	1.53	0.45	1.73	1.79	2.25	0.48
Regulatory quality	1.41	1.25	1.11	1.51	0.75	1.86	1.84	1.77	0.51
Rule of law	1.81	1.45	1.50	1.61	0.41	1.81	1.82	1.96	0.57
Control of corruption	1.44	1.58	1.51	1.68	-0.01	2.17	2.17	2.19	-0.15
Composite	8.92	8.23	7.29	8.51	3.13	10.49	10.27	11.08	2.17

Note: 1) Malta, Cyprus, Slovakia and Slovenia are excluded. Source: World Bank, *World Governance Indicators*, 2013.

Table 1. Institutional quality (euro area) (continued)

	IRL	MLT	PRT	ESP	CYP	SVK	SVN	Euro	Variation ¹⁾
					1998				
Voice/accountability	1.34	1.23	1.45	1.29	1.02	0.69	1.21	1.34	0.17
Political stability	1.41	1.33	1.31	0.35	0.22	1.09	1.12	1.08	0.36
Government effectiveness	1.83	0.91	1.09	1.64	1.22	0.52	0.79	1.62	0.47
Regulatory quality	1.68	1.01	1.16	1.24	1.18	0.44	1.05	1.28	0.40
Rule of law	1.6	1.26	1.23	1.31	0.93	0.2	1.22	1.43	0.42
Control of corruption	1.58	0.58	1.33	1.37	1.29	0.25	1.3	1.62	0.56
Composite	9.45	6.32	7.58	7.2	5.87	3.18	6.69	8.36	2.13
					2011				
Voice/accountability	1.32	1.12	1.12	1.10	1.08	0.95	1.03	1.21	0.23
Political stability	1.00	1.00	0.70	0.13	0.54	0.97	0.84	0.80	0.39
Government effectiveness	1.42	1.16	0.97	1.02	1.53	0.86	0.99	1.30	0.48
Regulatory quality	1.65	1.31	0.66	1.09	1.22	1.03	0.63	1.24	0.43
Rule of law	1.76	1.35	1.01	1.20	1.06	0.65	1.07	1.31	0.47
Control of corruption	1.52	0.91	1.09	1.06	0.96	0.29	0.93	1.19	0.70
Composite	8.67	6.85	5.55	5.61	6.39	4.74	5.49	7.05	2.50

Note: 1) Malta, Cyprus, Slovakia and Slovenia are excluded.

Table 1 presents the scores of six governance indicators for euro member states. The data for the year of 1998 and 2011 are presented to examine the extent to which institutional quality of each state has been changed after a single currency being adopted. The table also shows the scores of the composite index, which are the sum of those of six governance indicators, and the average score of euro area as well as variations in institutional quality among member states.

Focusing on the composite index, the euro area average fell from 8.4 to 7.1, implying the deterioration of average institutional quality in the euro area between 1998 and 2011.³ The disparity of member states has widened over time. The nations whose institutional quality improved during the euro era were only three out of initial twelve members (Belgium, France, and Luxemburg). In 2011, the scores of Greece and Italy were the lowest, which were 2.2 and 3.1, respectively. The next worst nations were Spain and Portugal whose scores were 5.5 and 5.6, respectively. Note that these four countries were at the centre of euro area financial crisis of 2011 and experienced a significant drop in institutional quality between 1998 and 2011. The quality of virtually all six dimensions of their governance has worsened over time. What these four countries had in common was, particularly, a serious deterioration in political stability and government effectiveness. Corruption level sharply rose, too, in case of Greece and Italy. Regarding new member states, only Malta's score was close to the average of initial 12 members.

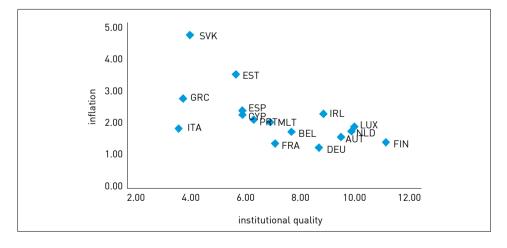


Figure 1. Institutional quality and inflation

³ In Table 1, the euro area average refers to the initial 12 members, Malta, Cyprus, Slovakia and Slovenia are excluded.

Figure 2. Institutional quality and long-term interest rate

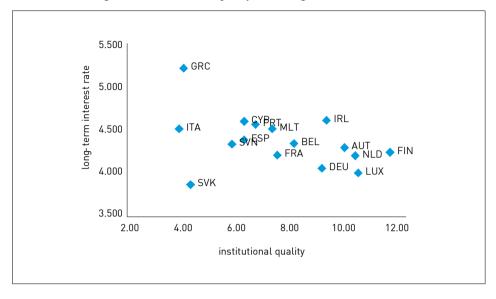
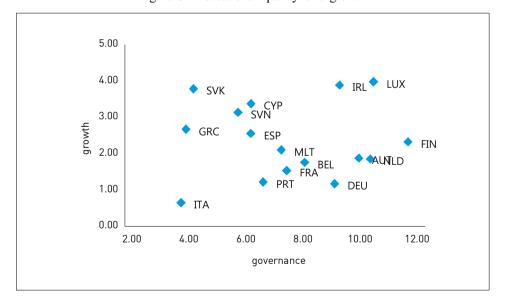
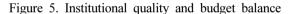


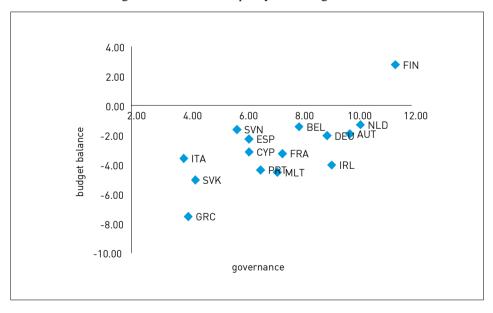
Figure 3. Institutional quality and growth

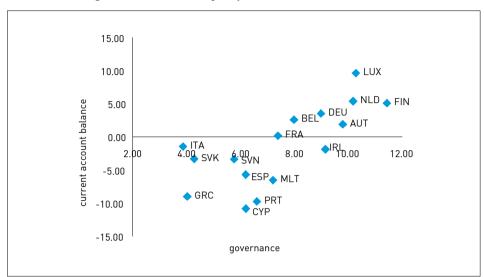


20.00 SVK 15.00 unemployment rate ESP ◆ GRC 10.00 ▶ FIN **ITA** 5.00 0.00 2.00 4.00 6.00 8.00 10.00 12.00 governance

Figure 4. Institutional quality and unemployment rate

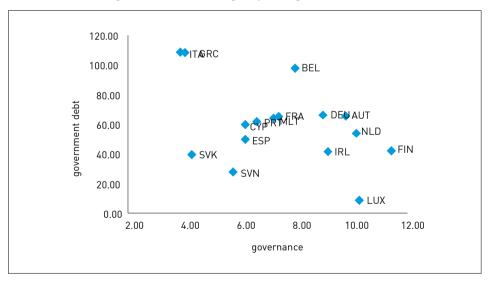






Figuer 6. Institutional quality and current account balance

Figure 7. Institutional quality and government debt



In Figures 1-7, the composite indices of governance for 16 member states are plotted against their main economic indicators. The data used are the average values of governance and economic indicators over the period of 2000-2011 and

1999-2011, respectively. As expected, the Figures show that institutional quality and economic performance are highly correlated with each other. A nation, which had better institutional quality, had lower inflation rate, lower long-term interest rate, lower unemployment rate, and lower budget and current account deficit. On the other hand, the relationship between institutional quality and growth rate is not unambiguous and so is for government debt. We can see, however, that institutional quality is negatively correlated with government debt when Slovakia and Slovenia are excluded. Notice that Greece whose score of governance was the lowest was the worst performer for most economic indicators while Finland, which had the highest score, was the best one.

Table 2. Bilateral estimations between economic performance and institutional quality of the euro area

-	~ .		- a .			a .			
	Growth		Inflatio		Budget de		Government debts		
	coefficient	R^2	coefficient	R ²	coefficient	R ²	coefficient	R ²	
Voice/accountability	0.032	0.000	-3.527*	0.462	7.460*	0.472	-40.070	0.099	
Political stability	0.347	0.017	-0.401	0.022	2.486	0.182	-33.499***	0.251	
Government effectiveness	0.083	0.003	-1.058*	0.402	2.659*	0.596	-17.317	0.178	
Regulatory quality	1.061	0.111	-1.904**	0.332	4.147**	0.349	-33.682	0.172	
Rule of law	0.205	0.008	-1.538*	0.434	2.972**	0.374	-22.446	0.153	
Control of corruption	0.299	0.018	-1.409**	0.363	3.674*	0.586	-21.532	0.140	
Composite	0.059	0.017	-0.282**	0.361	0.712*	0.520	-5.155***	0.200	
Political risk	0.041	0.043	-0.106**	0.266	0.302*	0.428	-2.376****	0.223	
	CA balances		Unemploy	ment	Interest	rates			
	coefficient	R^2	coefficient	R^2	coefficient	R ²			
Voice/accountability	17.984	0.544	-7.920**	0.285	-0.507	0.121			
Political stability	5.807***	0.197	-3.519***	0.205	-0.269	0.124			
Government effectiveness	5.895*	0.582	-2.559**	0.288	-0.191	0.165			
Regulatory quality	10.693*	0.461	-4.531***	0.230	-0.362	0.151			
Rule of law	7.202*	0.436	-3.812**	0.326	-0.187	0.081			
Control of corruption	8.394*	0.607	-3.013***	0.203	-0.289***	0.193			
Composite	1.665*	0.564	-0.740**	0.303	-0.054	0.166			
Political risk	0.631**	0.371	-0.339**	0.334	-0.019	0.114			

Note: *, ** and *** indicate that the estimated coefficients are statistically significant at 1%, 5% and 10% levels, respectively. The number of observations is 16.

Source: IMF, World Economic Outlook database, September 2013; International Financial Statistics, January 2013; Balance of Payments, January 2013.

World Bank, World Governance Indicators, 2013.

PRS Group, The International Country Risk Guide, 2012

To draw statistical inference from the data, economic indicators shown in Figures 1-7 are regressed not only on composite governance index but also on six individual indices. The estimation results are shown in Table 2. The estimated coefficients have expected signs for all cases. All coefficients are statistically significant at least 10% level for inflation, budget balance, current account balance, and unemployment. The exceptions are two cases where political stability does not significantly affect inflation and budget balance. Regarding the other variables (growth, interest rate and government debt), virtually all estimated coefficients have expected signs, but with no statistical significance. In case of government debt, it is significantly affected by the composite index of governance, but not by individual governance indices with an exception of political stability. Although regressions are simple and based on bi-variables, overall, we find a clear and significant relationship between economic performance and institutional quality of individual member states in the euro area.⁴

To check for robustness, we use another measure of institutional quality, a political-risk index in the International Country Risk Guide (ICRG), published by

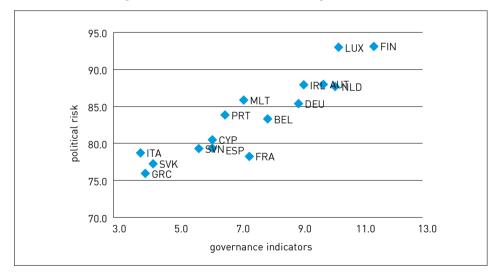


Figure 8. Governance indicators and political risk

⁴ We need to add the other control variables, which can affect economic indicators, to get more sophisticated estimation results. However, such empirical work is beyond the scope of this study since those control variables are not identical for all economic indicators. An extensive empirical work will be done in the future study.

the PRS Group. The index comprises twelve subcomponents and ranges from 0 to 100, where a higher point means lower risk. In Figure 8, the composite indices of WGI for member states are juxtaposed with their political-risk indices of ICRG, while both are averaged over the period of 2000-2011. We observe that these two indices are almost linearly correlated with each other, and the correlation coefficient is 0.92. Economic indicators are also regressed on the political-risk index. The results are shown in the last row of Table 2. As expected, estimation results are very close to those for the composite index of WGI.

To sum up, governance reforms, such as strengthening the SGP and the power of the EU institutions, have been proposed at the euro area level, but the disparity of institutional quality at the level of individual member states received less attention. The data support a close relationship between institutional quality and economic performance of member states. This fact implies that the root of the current euro debt crisis will not be eliminated unless wide discrepancies in institutional quality between member states get narrower.

4. Implications to East Asian Integration

Since the euro was successfully launched in 1999, the feasibility of adopting a single currency has been studied for other regions including East Asia (EA). Why are they interested in forming a currency union? The reason is that the member countries are benefited from using a single currency, such as minimization of transaction costs incurred in international trade and investment, and elimination of risks stemming from the uncertain future movement of exchange rates. Previous studies on a single currency area in EA failed to reach a consensus. For example, Pascha (2004) is very sceptical about a currency union in EA while Baek and Song (2002) and Kentaro (2012) take a positive stance on it.

In their study of a feasibility of a currency union in EA, Baek and Song (2002) conclude that some of 15 East Asian countries can be plausible candidates for adopting a single currency. OCA criteria are used to evaluate economic pre-conditions for a currency union. Data of the 1990s for EA countries are compared with those of EMU countries before the Maastricht Treaty was signed. Based on raw data and estimation results, they find that the 9 EA countries (China, Japan, Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand)⁵ are not remote from the initial 10 EMU members in satisfying the economic

⁵ Kentaro (2012) suggests ASEAN5 (Singapore, Indonesia, Thailand, Malaysia, Philippines), China, Japan and Korea as plausible candidates.

pre-conditions for an OCA. In this section, we discuss a governance system for a possible EA currency union, and compare EMU and EA in institutional quality to draw policy implications for an economic and monetary integration in EA.

4.1. Governance at the EA level

Several critical issues on governance at the EA level remain to be solved for an economic and monetary union in this region. First of all, EA still has no concrete plan to be economically integrated in the regional perspective. There are only several bilateral free trade areas in EA while factor mobility is very low. On the other hand, European economic and monetary cooperation was already implemented starting the Treaty of Rome in 1957, which not only incorporated the free movement of goods within a customs union (EEC) but also laid the foundations for the free movement of services, workers and capital.

The second issue is about finding momentum for integration in EA. The European case in particular with the ongoing euro crisis is not the right model and actually discourages any movement of integration elsewhere in the world. Japan is a possible candidate for the leading country. In contrast to Germany, the anchor country in EMU, however, Japan is relatively less open and has a low share of intra-regional trade. Its economic size is decreasing, and the efficiency and internationalization of its financial system lags behind those of the other developed countries. China can be another candidate. It is the second largest economy and the largest holder of international reserves in the world. But, capital movement is completely under control, and financial markets are shallow and underdeveloped. Now, moreover, it wants its own currency (the renminbi) to be internationalized rather than using a common currency in EA. It is unlikely that China, which possesses a huge amount of US dollar denominated assets, would swiftly alter its asset position toward a new regional currency.

Lastly, if the consensus appears for the regional integration in EA, there would still need the establishment of institutional architecture. There is virtually no institutional setup for an economic and monetary integration in EA. At present, the AMRO (ASEAN-plus-three Macroeconomic Research Office), the CMIM (the Chiang Mai Initiative Multilateralization) and ABMI (Asian Bond Market Initiative) may be the only institutional elements relevant to monetary cooperation and integration in EA.⁶ On the other hand, in Europe, a careful process of consultations

⁶ Here "three" denotes China, Japan and Korea. The AMRO is located in Singapore and began its operations in May 2011. It is a regional surveillance unit, which monitors regional economic conditions and supports for provision of prompt emergency liquidity to member countries in crisis.

and institutionalization had been under way over many decades in order to launch the euro in 1999.

4.2. Institutional quality of individual EA countries

We know that a country's institutional quality is an important factor affecting its economic performance as shown in the case of the euro member nations. Even if EA establishes a currency union whose governance system is comparable to that of EMU, the recent Eurozone crisis tells us that the union can be collapsed if the quality of institutions is heterogeneous among member nations.

We use the WGI data of EA countries, shown in Table 3, and compare them with those of EMU countries in order to explore the extent to which institutional quality of individual countries differs from each other in the two areas. EA countries under study are those that Baek and Song (2002) classified as plausible candidates for adopting a single currency in EA. An exception is that Taiwan is replaced by the Philippines, because the former's data are not available and the latter is an important member in EA.

JPN HKG IDN KOR MYS PHL SGP THA CHN EA Variation 1998 Voice/accountability 0.88 -0.08 -1.03 0.6 -0.23 0.38 0.25 0.41 -1.38 -0.02 0.75 Political stability 1.21 0.55 -1.72 0.4 -0.19 -0.33 0.77 0.44 -0.59 0.06 1.11 Government 1.14 1.19 -0.6 0.32 0.78 0.06 2.09 0.09 -0.14 0.55 0.74 effectiveness Regulatory quality 0.53 1.93 -0.3 0.26 0.51 0.33 2.15 0.1 -0.26 0.58 0.82 Rule of law 1.38 0.99 -0.68 0.76 0 -0.37 0.48 0.41 1.31 0.51 0.78 Control of corruption 0.93 1.42 -1.09 0.33 0.55 -0.15 2.23 0 -0.25 0.94 0.44 Composite 6.08 -5.41 2.67 1.83 0.3 8.8 1.55 -2.99 2.09 4.68

Table 3. Institutional quality (East Asia)

It is established to ensure the effective operation of the Chiang Mai Initiative Multilateralization (CMIM). The CMIM is a network of multilateral swap arrangements among ASEAN+3 countries. Its predecessor is the Chiang Mai Initiative (CMI), which is a version of bilateral swap arrangements and was created in May 2000 to play a role as regional financial safety nets after the 1997 Asian financial crisis. See Park and Oh (2010), and Takagi (2010) for more details on East Asian financial and monetary cooperation.

Table 3. Continued

	JPN	HKG	IDN	KOR	MYS	PHL	SGP	THA	CHN	EA	Variation
						2011					
Voice/accountability	1.02	0.51	-0.08	0.71	-0.44	-0.01	-0.19	-0.45	-1.64	-0.06	0.78
Political stability	0.97	0.96	-0.82	0.23	0.16	-1.39	1.21	-1.02	-0.70	-0.04	0.97
Government effectiveness	1.35	1.70	-0.24	1.23	1.00	0.00	2.16	0.01	0.12	0.82	0.86
Regulatory quality	0.90	1.88	-0.33	0.95	0.66	-0.26	1.83	0.24	-0.20	0.63	0.85
Rule of law	1.27	1.54	-0.66	1.01	0.52	-0.51	1.69	-0.24	-0.43	0.47	0.94
Control of corruption	1.50	1.84	-0.66	0.45	0.00	-0.78	2.12	-0.37	-0.62	0.39	1.15
Composite	7.02	8.43	-2.79	4.59	1.89	-2.96	8.82	-1.74	-3.47	2.20	5.13

Source: World Bank, World Governance Indicators, 2013.

As in Table 1, Table 3 presents the scores of 6 governance indicators and their composite index for 9 EA countries. Regarding the composite index of governance, the EA average in 2011 was 2.2, almost equivalent to that in 1998. Except China, the Philippines, and Thailand, governance scores of all EA countries rose between 1998 and 2011. For China, the main factors that led to worsening institutional quality are lower voice/accountability and higher corruption. Philippines' score has decreased over time for all governance indicators. Singapore and Hong Kong have the best quality of governance, while China, Philippines, Indonesia and Thailand are among the worst countries.

8.00 6.00

Eurozone

– – – East Asia

2010

Figure 9. Institutional quality: euro area and East Asia

2.00

0.00

1996

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Figure 10. Institutional quality variation, euro area and East Asia

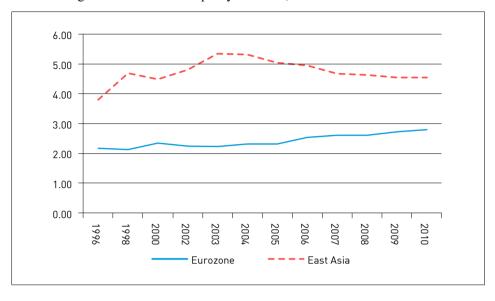
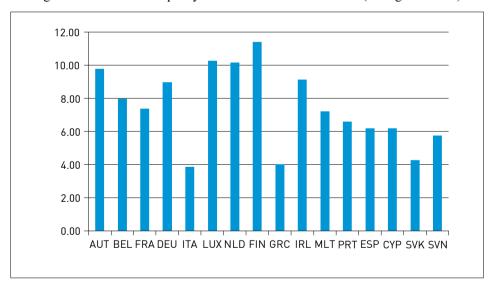


Figure 11. Institutional quality of euro area member states (average 2000-11)



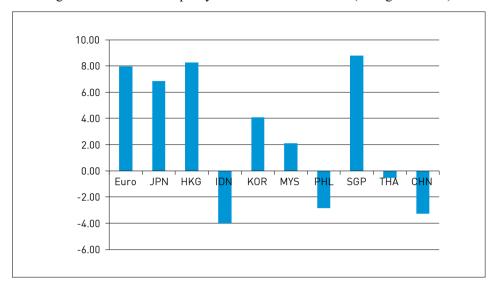


Figure 12. Institutional quality of East Asian countries (average 2000-11)

Notice that EA lags far behind the euro area: on average, the degree of euro area's institutional quality is about four times higher than that of EA. The composite governance indices for two areas are compared over 1996-2011 in Figure 9, showing that euro area has been persistently in a better position than EA in overall institutional quality. What is worse is that EA countries are much more diverse than euro area members, about twice of the latter as shown in Figure 10. Figures 11 and 12 present the averages of institutional quality over 2000-2011 for EMU and EA countries, respectively. We can clearly see their differences. Among EA countries, only Singapore and Hong Kong show better qualities than the EMU average. Even Japan falls behind the euro area average. Korea's quality is about the same as that of Italy and Greece, which perform least well among euro area members. Indonesia, Thailand, and China mark even negative scores.

4.3. Summary and policy implications

There has been no concrete action plan for an economic and monetary integration in EA. Compared to the euro area, EA countries are much more heterogeneous in production structure, development level, economic size, and so on. Moreover, EA is far behind the euro area in governance system at the regional level and in institutional quality at the individual country level.

For an economic and monetary integration to be actually enforced within EA,

it is important to reduce the disparity of institutional quality among EA countries and improve the overall level of institutional quality of its member states. One remark may be worth making. China's renminbi is becoming a regional currency with its border countries and trading partners especially in Asia. If the renminbi becomes a regional or international currency, it is not at all likely that a single currency is used in EA. Note that there are two contrary views on the international role of the renminbi: the one view is that the renminbi will become an international currency pretty soon and compete with the US dollar and the euro (Bergsten, 2009, 2011; Eichengreen, 2007, 2011; and Williamson, 2009). The other view is that international use of the renminbi is premature, and it can play a role only as a settlement currency, not as an investment and reserve currency (Cooper, 2009; and Baek and Oh, 2009). The main reason is that it is expected to take a long time for China to lift tight capital control and to enhance underdeveloped financial markets. The fact that China's institutional quality is one of the lowest among EA countries hinders the prospects of its economic performance and its currency emerging as an international currency.

5. Concluding Remarks

This paper studies the quality of institutions in the euro area and draws implications to East Asian economic integration. The euro governance system is not close to an ideal one as shown in the recent sovereign debt crisis. In response to the crisis, leaders of the euro area and the EU have made an effort to improve economic governance system at the EU level such as (i) strengthening the SGP and economic policy coordination and (ii) developing stabilization tools to face short term challenges. But many people believe that the only solution is to set up a European system of fiscal federalism or political union, which is difficult to be realized. What they overlook is institutional quality of individual member states, which had a close relationship with their economic performance. The data support that governance reforms proposed at present cannot solve the fundamental problems of the EMU governance system unless disparities of institutional quality in member states are dissolved. We suggest that governance reforms should be made not only at the euro area level but at individual member states level and the convergence criteria for all dimensions of institutional quality are needed for EMU member states.

Compared to EMU, an economic and monetary integration in EA is still in its infancy. There are virtually no institutional elements, no political solidarity, and no consensus on the role of leading countries in EA. Improving on these is a core part of the process to establish regional governance system. EA lags behind the EMU in its overall institutional quality, which thus should be improved.

Finally, much are unknown in governance and its links to the economy. Future studies should unveil many empirics of the governance system. Once done, they can be applied to different layers of societies at national, transnational, and global levels.

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