Relationship between good governance and economic growth: A contribution to the institutional debate about state failure in developing countries
Rachid Mira, Ahmed Hammadache

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Abstract: Numbers of economists of development consider that good governance, defined as the quality management and orientation of development policies has a positive influence on economic performance. The question is what content the literature gives to the concept of governance? According to the World Bank, good governance is evaluated by the implementation capacity of governance principles of a country, providing a framework for market development and economic growth. Several econometric studies (Kauffman et al. (1999, 2005), Knack et al. (1999) tested the relationship between good governance in the sense of "market-enhancing governance" (stimulus institutions market) and showed a positive relationship between good governance and economic growth. However a good governance policy is allows developing countries to achieve minimum economic growth and political reforms in order to reach a level of development similar to that of industrialized countries? We focus on the definition and the work on the concept of good governance made by the World Bank and criticism formulated by Mushtaq Khan (2002,2004), who reconstructed the notion of governance in a broader sense, taking into account the capacity of states to drive structural change in institutional, political, economic and social fields, in order to ensure longterm economic growth. Is good governance can explain economic performance? Or according to the thesis of Mushtaq Khan (2002, 2004), reforms of economic structures and government capabilities are the first step to improve economic performance of developing countries, and in a second step to allow economic growth to enhance good governance? Following several works of neo-institutionalist economists on the relationship between economic growth and good governance (Kauffman D. and al.1999, 2005, Knack S. and Keefer P. 1997, Hall, R. Jones, C.1999, Clague, C. Keefer P., Knack S. and Olson M., 1997, Barro R., 1996, Rodrick D., 1995, 1997, and 2002) emerged two divergent theories of "state failure" in developing countries: The first thesis (market Enhancing governance) defended by neo-institutionalist authors consider the state as a sovereign role and welfare state. Economically, the proper functioning of markets is correlated to the proper functioning of institutions through efficient practice of state governance, what is commonly called "good governance". Therefore, underdevelopment and low economic growth performance of countries could be explained by a "state failure" and the components of good governance with the increase in corruption, instability of property rights, market distortions, and lack of democracy. The second thesis (growth Enhancing governance) developed in particular by Mushtaq Khan (1995, 2004, 2005, 2006) and partly by Dany Rodrik (1995,1997,2002), concerns the ability of the state to implement social change and a voluntary policy of economic development: The transition of developing countries towards a capitalist system comparable to that of developed countries, can not operate without the establishment of efficient institutions in relation with distribution of political power in these countries. Conversely, those countries would face a state failure, as a result of a mismatch between institutions and economic policy for development. Our research consists first to present the results of an empirical model that we have done based on a panel of developing countries chosen by region (MENA, Latin America, and Asia) and due to their natural resource endowment. The aim is to check if growth rate may or may not be correlated with good governance indicators as defined by the World Bank. The goal is to lead in a second time an analysis of criticism made by Mushtaq Khan on the definition of governance, the causes of state failure and barriers to economic development. Our contribution is to discuss the concept of good governance and the failure of states that take into account the level of development and governance capacity that is based on a structure and distribution of political power that evolves in time and may or may not be positive for growth. The assumption we make here is that the so-called good governance policies are relevant if countries reach a sound level of economic and social development that enable institutions of good governance to boost growth. Keywords: States Failures, Good Governance, Economic Growth, Development policy JEL Codes: F59, N30, O10, O11, O17, O40, O53, P26, P45 Note: Article présenté lors du workshop Institutions et développement économique organisé par le Centre de Recherche en Economie Appliquée au Développement (CREAD) de l’Université d’Alger en septembre 2013, puis retravaillé et proposé lors du congrès annuel de l’AFSE à l’université de Rennes en juin 2015 ainsi qu’un poster sur le sujet.
Introduction:

Good governance, defined as the quality management and orientation of development policies is assumed by many economists, having positive influence on economic performance. The question is what content the literature gives to the concept of governance? According to the World Bank, good governance is evaluated by the implementation capacity of governance principles of a country, providing a framework for market development and economic growth. Several econometric studies (Kauff man et al. (1999, 2005), Knack et al. (1999) tested the relationship between good governance in the sense of "market-enhancing governance" (stimulus institutions market) and showed a positive relationship between good governance and economic growth. However a good governance policy is allows developing countries to achieve minimum economic growth and political reforms in order to reach a level of development similar to that of industrialized countries?

We focus on the definition and the work on the concept of good governance made by the World Bank and criticism formulated by Mushtaq Khan (2002,2004), who reconstructed the notion of governance in a broader sense, taking into account the capacity of states to drive structural change in institutional, political, economic and social fields, in order to ensure long-term economic growth. State capabilities are conceived as the aptitude to conduct policies which enhance good institutions and lead to economic growth. We assume that same institutions did not have the same effects in time and space. Then, we need to modulate good governance policy according to countries in which they are implemented. The transition of developing countries towards a capitalist system comparable to that of developed countries can not operate without the establishment of efficient institutions in relation with distribution of political power in these countries. Conversely, those countries would face a state failure, as a result of a mismatch between institutions and economic policy for development.

Our research consists first to present the results of an empirical model that we have done based on a panel of developing countries chosen by region (MENA, Latin America, and Asia). The aim is to check if growth rate may or may not be correlated with good governance indicators as defined by the World Bank. The goal is to lead in a second time a criticism made by Mushtaq Khan on the definition of governance, the causes of state failure and barriers to economic development. Our contribution is to discuss the concept of good governance and the failure of states that take into account the level of development and governance capacity that is based on a structure and distribution of political power that evolves in time and may or may not be positive for growth. The assumption we make here is that the so-called good governance policies are relevant if countries reach a sound level of economic and social development that enable institutions of good governance to boost growth.

1 Good governance, state failure and economic growth: the state of the debate

1.1 Approach neo-institutional economists' institutions called Good Governance positively affect economic growth.

Institutions are all formal rules (legal, economic, political) and informal rules (social, behavioural norms, conventions) that structure social life. According to Douglass North (1990), a distinction was made between formal and informal institutions. Good governance in the definition of the World Bank is the capacity of management and institutional reforms conducted by state policy, that improve coordination and delivery of effective public services, accountability of political actors and individual citizens in the driving of development policies. Good governance therefore connects adequate political institutions and practices to allow development. Several econometric studies (Kauff man et al,
2005, Knack et al, 1999) tested the relationship between good governance in the sense of "market-enhancing governance" (stimulus institutions contract): a positive relationship has been obtained between good governance and economic growth. Then implementation of good governance policies can promote economic development and ensure convergence towards level of developed economies.

1.1.1 Indicators of Good Governance according to the World Bank: Presentation and interpretation according to Douglass North thesis (1990).

The World Bank (Kaufmann, Kraay, Mastruzzi, (1999-2007) built composite indicators summarized under six headings:
- "Voice and accountability": which measures tendencies of political process, civil liberties, political rights and independence of the media. The responsibility is that of citizens who participate in political life through elections, public decisions.
- "Political instability and violence": which measures the perception of a possible destabilization of the political regime through elections or violence.
- "Government effectiveness": which measures the perception of the quality of public service or public administration. This index assesses the perception of the government's credibility through the trust given to its administration.
- "Rule of Law": measures the perception of citizens of the rules that structure society and the degree of compliance with these rules. The indicator measures the perception of the efficiency and fairness of the judicial system and respect for contracts and agreements tied.
- "Quality control": measures perceptions which are favourable or not for market economy, including anti-liberal interventionist policies such as price controls, imports and exports, the banking system. This index allows us to appreciate the business climate for foreign investors, for example.
- "Control of corruption": measures perceptions of the use of public power in the pursuit of private gain.

These indicators are rated on a scale as appropriate -2.5 to +2.5 or on a scale from 0 to 100. The lowest indicator is considered as the least favourable and above the most favourable.

The purpose of the construction of these indicators is to measure the evolution of good governance by country and implement a policy to improve these indices in order to ensure that improving good governance could reduce the failure of state. Indeed, in the first argument, the state perceived in its functions as a public services provider, is right but seems to be narrow if it assumes to reflect the ability of the state to carry out economic development policies and policy changes and social. The role of the state is certainly to create a set of institutions that constitute the "rules of the game" (D. North, 1990), which offer people incentives, opportunities, so that social coordination operates. The institutions included in the indices of the World Bank include security of property rights through the "rule of law" indicator for example. Nevertheless, the improvement of this indicator needs to take into account the notion of "enforcement" (D. North, 1990) considered as efficiency or a certain degree of enforcement. The state must be equipped with skills so that it has capacity in binding rules it has issued. Hence the construction of institutional indicators would include measuring the degree of respect, quality and efficiency of the rules.

Institutions and evolution of institutions developed by North (2005) have influenced the definition of indicators of the World Bank. It is interesting that North diagnosed failure in development of economies of the Third World, because of their institutional weakness, which causes historical stagnation and contemporary underdevelopment in the Third World. Specifically, Douglass North highlights the arguments of insecure property rights, legal rules ambiguity and uncertainty in the behaviour of agents of the economies of the Third World.
From this institutional diagnosis could have emerged the first thesis which put in relation failure of states and "bad governance" of states that could not provide an institutional framework conducive to growth and economic performance.

1.1.2 Indicators of Good Governance from IRIS (University of Maryland, USA)

Stephen Knack (2005), constructed indicators of good governance with his team of IRIS (Maryland University), in reference with institutional concepts of Douglass North (1990) in order to support the thesis of initial conditions for economic development: only improved good governance can lead to secure property rights, improved equity and legal credibility secure contracts assumed by the government whose bureaucratic quality and low corruption exist. Thus government can promote entrepreneurship, orient investment and production in sectors producing wealth and not in others unproductive sectors which are sources of rents far from the optimum of social income in the sense of economic theory. Stephen Knack believes that there is a consensus among economists about the sources of growth which can not be explained solely by natural resources, climate or foreign aid, but by the institutional conditions that encourage economic activities sources of wealth by reducing transaction costs due to the security of contracts, the institutional framework that promotes investment, production, specialization, and building of human capital.

Stephen Knack and Philip Keefer (1995) used similar indicators as those of the World Bank, which took into account the impact on risk issues - Country: these indicators are five in number and include "corruption in the government," "state right "," the risk of expropriation "," repudiation of contracts by the government, "" the quality of the bureaucracy. " Stephen Knack and Philip Keefer (1995) have found that an increase in the composite index of 12 points on a scale of 50, allows annual growth rate of income per capita to increase by 1.2% on average. They developed a synthetic indicator named "ICRG Index" which represented an explanatory variable of income growth per capita: The model includes other explanatory variables:

- the level of education (between 1980 and 1998)
- the log of inflation (between 1980 and 1998)
- the coefficient of variation of inflation (same period)

Monetary mass M2 / GDP and Exports / GDP

All these variables were chosen because of their significance in the literature of good governance and explanation of growth of GDP per capita.

1.2 Empirical results of the works of Daniel Kaufmann from World Bank

Daniel Kaufmann et al. (2005) developed a set of six composite indicators covering nearly 190 measures perception of governance and agglomerate the collection of data from 17 institutions, out of 170 countries. The Kaufmann studies have to correlate the quality of governance with the per capita income in all the countries studied. The objective is to construct a set of indicators which measure the evolution of good governance per country. Those tools permit to conduct policy of enhancing good governance and reducing state failure.

Their econometric studies show, a significantly positive relationship between income per capita growth rates and improvement of components each indicator of good governance.

More precisely their empirical researches conclude that:

- Better governance has a significant positive effect on per capita income
- An improvement in income leads to better governance
Other factors affect the increase in income and wealth of countries and are also associated with better governance.

Daniel Kaufmann sustains the thesis that the relationship between governance and income levels and GDP growth rate operates in an opposite direction, and that high income levels could affect positively good governance indicators. But Kaufmann’s studies show that for some Latin American countries, in the short term high income levels produce only weak governance. So even though the relationship appears weak, Kaufmann assume the hypothesis that a policy that enhance good governance indicators in developing countries could have in medium term, a positive effect on income levels and then consolidate growth per capita in that emerging countries.

In another paper Daniel Kaufmann and Aart Kraay (2002) entitled "Growth without Governance" analyse the causality between growth in per capita income and governance, leading them to analyse growth of per capita income over the long term, particularly the last two centuries, and did not reveal big differences between countries. The gap in per capita income that we know today comes from industrial and technological revolutions that have historically allowed the accumulation of physical and human capital and achieve a level of wealth and income per head of the current developed countries, at the opposite of developing countries that have not experienced the same social transformations.

Referring to the work of Robert Hall, Charles Jones (1999) and Daron Acemoglu, Simon Johnson, James Robinson (2001), countries that have high income levels today have experienced in the last two centuries fast rates of economic growth. Their economic performance can be interpreted by deep historical differences in the quality of their institutions. This work has focused on developing countries that had a colonial history and show a strong relationship between initial institutional quality and growth in the long run.

Daniel Kaufmann consideration of reverse causality, from income levels of governance, is plausible if countries with high incomes could financially implement good policy governance, improving such institutions as government effectiveness, rule of law and control of corruption. But does the relationship between growth in per capita income and governance always positive? Daniel Kaufmann and Aart Kraay (2002) answer no, because the sign of the positive or negative causality depends on the implementation of a proactive policy of states that build a set of efficient institutions and search in improving the so-called good governance. Daniel Kaufmann's thesis is that causality could not be positive without considering the political will and the existence of feedback mechanisms between per capita income and governance, to create a "virtuous circle" good governance and national wealth.

Thus the thesis of improving per capita income and waiting a mechanical improvement of governance is challenged by Daniel Kaufmann. He followed in a certain way thesis developed by Mushtaq Khan (since 1995) of the role of political factor in economic growth: in effect, Mushtaq Khan developed the concept of "political settlement" and "patron-client networks" combined with his analysis of the "rent-seeking", explaining that good governance can only occur if one overcomes the symptoms of "state failure". The state can improve its governance and makes economic reforms for growth, if the elites forming the coalition have a coincidence of interests between growth strategy and their proper rent seeking. Daniel Kaufmann develops a similar thesis explaining the existence of "feedback" in the negative relationship between per capita income and governance, which are caused by the phenomenon of predation of State, defined as the illegal or improper influence of the state represented by its elites forming interest groups, on the construction of laws, policies and rules, which can lead to poor governance. Thus per capita income can increase without improved governance, when the latter does not converge with the interests of the elite.
1.3 Critique of good governance by Mr. Khan and theoretical alternative to the relationship between institutions and growth in developing countries.

As we saw earlier, economists oppose two theses on the role of institutions in the definition and establishment of good governance: the so-called theory of "market Enhancing governance" which attributes to the State strictly sovereign functions of Justice, police and compliance with market rules. The state would be the actor who would establish and strengthen the institutional rules, so that the market can operate more efficiently by ensuring the exchange contracts, private property, establishing incentives and binding rules for the market.

1.3.1 Discussion of Mushtaq Khan’s thesis about relationship between good governance and economic growth.

Several econometric studies of Daniel Kaufmann and Aart Kraay (1999), Stephen Knack and Philip Keefer (1995, 1997), Robert Barro (1996), Hall and Jones (1999) showed that the variables of good governance such as control of corruption, stability of property rights or democracy are closely correlated with variables such as GDP growth rate per capita, investment or human capital development. These empirical tests seek to support the first view already cited the relationship between market enhancing governance and economic performance of the countries implementing it. The purpose of these studies is to show that improved indices of "good governance" have positive effects on economic growth and provide long-term convergence with the so called developed countries.

Among the precautions taken by Mushtaq Khan to interpret the results of this literature, the question of temporality is questioned: indeed, if we want to test the effect of good governance mechanisms on economic growth, it should be taken a reference period of these institutional indicators, in order to study the effects on economic growth for example a decade or two decades later (data collected by Stephen Knack and IRIS began in 1984 and data collected by Daniel Kaufmann and the World Bank began in1996). Thus, the authors took the choice to study relationship between good governance at the end of the period of economic growth which began in 1984 for Stephen Knack’s data or in 1996 for Daniel Kaufmann’s data. In effect, economic growth period studied is the consequence of political and institutional capabilities developed since the 1950's and 1950's in Asian countries for example. Good governance indicators of the eighties and nineties are thus not correlated to economic growth which results in the same period. There is a gap period to take into account when considering effect of good governance on economic growth; otherwise there is a methodological bias. So this means, according to Mushtaq Khan, that the actual relationship studied and not assumed by authors is that of the effect of economic growth on good governance. However the dependent variable chosen is that of economic growth! The second problem is to take into account a threshold effect in the step reached by countries in their economic growth: underdeveloped countries could make efficient good governance policies only after a period of learning in state capabilities and after reaching a level of development, so that enhancing good governance indicators could generate better economic growth rates.

1.3.2 Other theoretical difficulties highlighted by Mushtaq Khan

The series must select low- and high economic growth to allow detection of the possible correlation between good governance and growth. However, most so-called emerging Asian countries which have successfully developed their economy have experienced strong growth rates from the 1960s through 1980. However statistical series of good governance indicators
start at best for Stephen Knack in 1984 and the worst for Daniel Kaufmann in 1996. If we assume a strong relationship between good governance and economic growth for these rapidly developing countries, we have a lack of institutional indicators in their early historic period of economic takeoff. The significance of the correlation cannot be shown as posteriori with indicators of ‘good governance’ for a more recent period of economic growth. Furthermore, the number of years observed in order to make a robust econometric test is not sufficient to explain the performance in terms of economic growth for emerging countries of the Asian region in particular and enable better understanding of the institutional mechanisms for their economic success. Another major obstacle is that the levels of the indicators of good governance, although available over the recent period only, do not show a significant difference between fast-growing countries and countries with slow growth. In other words, good governance of fast developing countries does not differ significantly from that of low developing countries. Although we can establish a significant correlation between good governance and economic growth, the level of fast-growing countries indicators do not converge to the so-called developed countries. Here is a graphic illustration of non-disparity in the results of good governance among countries in slow and rapid development indices obtained during the panel econometric studies of IRIS and the World Bank:

The empirical results of Stephen Knack and Daniel Kaufmann reveal a strong correlation between good governance and GDP growth rate per capita, without convincing that the level
of institutional indicators of fast developing countries can converge with that of developed countries. We can therefore conclude that the enhancing of good governance can not be a guarantee of GDP per capita growth and vice versa, the GDP per capita growth can allow improving governance without guaranteeing that its level may converge with that of developed countries. So it must be inferred that other factors may explain at once the growth of GDP per capita and the improvement of good governance indicators.

2. Empirical study: is there correlation between good governance and GDP?

2.1 Empirical Analysis

Our econometric study aims to provide answers to the questions of the relationship between economic performance and quality of institutions in forty five developing countries. Several models are estimated, first a panel with fixed effects on GDP growth and GDP per head and finally the growth rate of deviation from the global average over the period 1996-2011. We tried to explain what the role of institutions in economic performance of different regions studied (MENA, MENA oil, non-oil MENA, Latin America, East Asia and South). The chosen model combines the determinants of economic performance (GDP growth rate and the GDP per capita) Internal (institutional quality) and external (commodity prices, index of risk perception of global finance and rates Growth in the developed world).

So the model used is:

\[ TCPIB_{it} = \alpha_0 + \alpha_1 \cdot MP_{it} + \alpha_2 \cdot finance_{it} + \alpha_3 \cdot TCMonde_{it} + \alpha_4 \cdot INSTIT_{it} + \epsilon_{it} \] \hspace{1cm} (1)

\[ TCPIB_{par,t} = \alpha_0 + \alpha_1 \cdot MP_{t} + \alpha_2 \cdot finance_{t} + \alpha_3 \cdot TCMonde_{t} + \alpha_4 \cdot INSTIT_{t} + \epsilon_{t} \] \hspace{1cm} (2)

\[ TCPIB_{par,t} = \alpha_0 + \alpha_1 \cdot MP_{par,t} + \alpha_2 \cdot finance_{par,t} + \alpha_3 \cdot TCMonde_{par,t} + \alpha_4 \cdot INSTIT_{par,t} + \epsilon_{par,t} \] \hspace{1cm} (3)

\[ TCPIB_{par,t} = \alpha_0 + \alpha_1 \cdot MP_{par,t} + \alpha_2 \cdot finance_{par,t} + \alpha_3 \cdot TCMonde_{par,t} + \alpha_4 \cdot INSTIT_{par,t} + \epsilon_{par,t} \] \hspace{1cm} (4)

**TCPIB**: Growth rate of real GDP; **TCPIB par tête**: GDP growth rate per capita ,

**MP**: Index of commodity prices (index calculated with an ACP applied to 12 commodity prices).

**finance**: Index of risk perception of global finance, used as a proxy of international finance (index calculated with ACP applied to three indicators of financial markets: VIX Adj Close, Spreads Developing Countries and BofA Merrill Lynch High Yield II optional adjusted spread).

**TCMonde**: Growth rate of the developed world (calculated index with an applied ACP. Indexes of Finance, commodity prices, growth rate of developed countries are illustrated by figures at page 18-19.

**INSTIT**: Index of institutional quality (index calculated with an applied ACP on 6 indicators from the World Bank, described on page 4): Voice and Accountability: Political instability and violence: Effectiveness of Government: Quality of regulation: The rule of law: Control of Corruption.

**vol**: Voice and accountability, **Poli**: Political instability and violence ,

**Gover**: Government effectiveness, **regul**: Quality of regulation, **Rule**: Rule of law, **corru**: Control of corruption.
2.1.1 The dependent variable chosen here is the GDP growth rate:

The synthetic variable INSTIT is not significant for equations 1 and 3, so decomposition of Institutions variables results in the introduction in the model (equations 2, 4) of 6 institutional variables as defined by Daniel Kaufmann. We note that 4 of 6 variables have a positive correlation with GDP growth. However only 2 variables are significant, as the t-stat shows that rejection of H0 concern only the variables "government effectiveness" and "political stability and reduction of violence." They respectively show correlation coefficients of 0.011 for a very significant probability of being different from 0 at 5%. Conversely, other variables such as the control of corruption, regulatory quality, rule of law and voice and accountability are not significant for the whole panel. At this stage we can not conclude that institutions play a significant role in the growth of the GDP of our entire panel. For the UM, there is as for all of the panel, a non-significance of aggregate INSTIT variable and only "regulation quality" variable and "political stability and reducing violence" are relatively significant in relation to other variables Institutional: their coefficient of +0.05 and +0.09 are with a t-stat in which the probability of rejecting H0 is nearly 5% and 10% respectively. In short, the quality of regulation corresponding to the perception of obstruction by the regulations of the state on the autonomous functioning of the market for goods and services, banking, foreign trade, a significant effect on the growth rate of GDP.

If you look in the MENA oil region, we see that the variable growth rate in developed countries, raw materials have a positive coefficient, very significant for the variable growth in developed countries but relatively insignificant for the price of raw materials with a t-stat which the probability of rejecting H0 is 10%. Likewise for the Finance variable, the variable plays negatively with a t-stat comparable probability to raw materials. Only institutions as aggregate variable remain insignificant with a high probability of accepting H0. Nevertheless, note that the variables "voice and accountability" and "control of corruption" are a negative sign, which means that such an increase in corruption would increase GDP growth. However, the non-significance of these variables does not allow us to discuss this correlation. So for oil MENA countries, we do not see influence of institutions on the GDP growth rate. For the non-oil MENA, we find that the variable is not significant INSTIT Coefficients growth rate of developed countries and Raw materials are significant with a probability of rejecting H0 at 5%, respectively. Finance plays negatively but with a probability of rejecting H0 less significant.
It can be concluded that for the non-oil MENA, institutions do not play a role in the growth of GDP of these countries.

If the institutional variables are thus decomposed, and then it is surprising that some variables like "voice and accountability" "control of corruption", and "rule of law" has a negative sign, but their significance remains low, except for the variables "quality of regulation" and "political stability and reduction of violence" which differs in MENA oil countries where all institutional variables were all not significant. So we can conclude that it is the non-oil MENA countries which make relatively significant variables "regulation quality" and "political stability and reduction of violence."

In Latin America the variables playing a significant role in the model are, developed countries growth rate, price of raw materials and Finance, although the latter negatively affects the growth of GDP. Again, the aggregate INSTIT institutional variable proves insignificant.

<table>
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<td>0.021*</td>
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*** p< 0.01 , **p<0.05, *p<0.1
Unlike the MENA countries, institutions "voice and accountability", "political stability and reducing violence" reveal a significant coefficient with a probability between 6 and 7% of error. As for the other variables: growth in developed countries and commodities has a positive and significant coefficient at 5%. Finance a negative and significant coefficient 10% error.

In Asia, the model reveals that variables growth rates in developed countries and commodity prices are highly significant with a rejection of the hypothesis H0 at 5%. Finance variable although with negative coefficient does not appear significant, the probability of rejecting H0 reached the level of error of 78%. INSTIT variable remains as previously insignificant.

By decomposing INSTIT variable in 6 institutional variables, we find that the variables "voice and accountability", "control of corruption", "government effectiveness" are the most significant, albeit with a negative sign for the variable "control of corruption " which would mean that the decrease in the control of corruption, so an increase in perceived corruption would have a positive effect on GDP growth. This paradoxical result is also found with the variable "political stability and reduction of violence" that degradation would be consistent with an increase in GDP growth. It should be noted that the results of any such negative factors were found for some institutional variables in Latin America, including the variable "rule of law" generally negative in Latin America and Asia, but not enough significant.
### Table 2: Variable to explain GDP per capita

<table>
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<tr>
<th>Variables</th>
<th>Selection by région (period 1996-2011)</th>
<th>MENA sample countries</th>
<th>MENA petroleum countries</th>
<th>MENA sample non petroleum countries</th>
<th>Latin sample countries</th>
<th>America (14 countries)</th>
<th>Asia sample (14 countries)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>total sample : (45 countries)</td>
<td>(3)</td>
<td>(4)</td>
<td>(3)</td>
<td>(4)</td>
<td>(3)</td>
<td>(4)</td>
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<td>Growth rate in developed world</td>
<td>0.011*** *(6.23)</td>
<td>0.0107** *(6.40)</td>
<td>0.013** *(5.15)</td>
<td>0.018** *(4.85)</td>
<td>0.018** *(4.64)</td>
<td>0.007** *(2.92)</td>
<td>0.008** *(3.26)</td>
</tr>
<tr>
<td>Price in raw material</td>
<td>0.009*** *(5.28)</td>
<td>0.0096** *(5.40)</td>
<td>0.006** *(2.63)</td>
<td>0.005* *(1.52)</td>
<td>0.005 *(1.37)</td>
<td>0.005** *(2.96)</td>
<td>0.006** *(1.98)</td>
</tr>
<tr>
<td>Indice of Financial risk</td>
<td>-0.014** (-3.07)</td>
<td>-0.01491** (-3.31)</td>
<td>-0.012** (-1.91)</td>
<td>-0.014** (-2.15)</td>
<td>-0.016* (-1.67)</td>
<td>-0.017* (-1.71)</td>
<td>-0.008* (-1.35)</td>
</tr>
<tr>
<td>Institution</td>
<td>0.024 *(1.38)</td>
<td>0.039 *(1.49)</td>
<td>0.028 *(0.78)</td>
<td>0.001 *(0.33)</td>
<td>0.026 *(1.004)</td>
<td>0.002 *(0.08)</td>
<td>0.026 *(1.004)</td>
</tr>
<tr>
<td>Voice and accountability</td>
<td>-6.70E-05 (0.09)</td>
<td>-0.040 (-0.76)</td>
<td>-0.037 (-0.47)</td>
<td>-0.008 (-1.21)</td>
<td>0.107 *(1.45)</td>
<td>0.096** *(2.07)</td>
<td>-0.187** (-3.25)</td>
</tr>
<tr>
<td>Control of corruption</td>
<td>0.010 *(0.46)</td>
<td>-0.031* (-0.66)</td>
<td>-0.053* (-0.86)</td>
<td>-0.034* (-0.51)</td>
<td>0.048 *(0.76)</td>
<td>-0.033* (-0.39)</td>
<td>0.275** *(4.30)</td>
</tr>
<tr>
<td>government efficiency</td>
<td>0.011** *(4.48)</td>
<td>0.011** *(4.46)</td>
<td>0.087** *(2.5)</td>
<td>0.093 *(1.97)</td>
<td>0.051 *(0.59)</td>
<td>0.151** *(3.25)</td>
<td>-0.025* (-0.96)</td>
</tr>
<tr>
<td>political stability</td>
<td>0.011** *(4.46)</td>
<td>0.011** *(4.46)</td>
<td>0.087** *(2.5)</td>
<td>0.093 *(1.97)</td>
<td>0.051 *(0.59)</td>
<td>0.151** *(3.25)</td>
<td>-0.025* (-0.96)</td>
</tr>
<tr>
<td>Quality of regulation</td>
<td>0.001 *(0.05)</td>
<td>0.089* *(1.77)</td>
<td>0.029 *(0.43)</td>
<td>0.029 *(0.43)</td>
<td>0.055* (-0.63)</td>
<td>-0.026* (-0.46)</td>
<td>-0.039* (-0.703)</td>
</tr>
<tr>
<td>Rule of state</td>
<td>0.011 *(0.30)</td>
<td>-0.023* (-0.27)</td>
<td>0.031 *(0.28)</td>
<td>0.038 *(0.73)</td>
<td>-0.103* (-1.34)</td>
<td>-0.034* (-0.47)</td>
<td>0.074** *(8.60)</td>
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<tr>
<td>constant</td>
<td>0.077** *(14.33)</td>
<td>0.083** *(6.08)</td>
<td>0.075** *(7.82)</td>
<td>0.087** *(1.85)</td>
<td>0.098** *(5.11)</td>
<td>0.087** *(0.99)</td>
<td>0.070** *(5.37)</td>
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<tr>
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<td>540</td>
<td>204</td>
<td>204</td>
<td>132</td>
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<tr>
<td>R2</td>
<td>0.17</td>
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<td>0.26</td>
<td>0.29</td>
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</table>

*** p< 0.01 , **p<0.05, *p<0.1

2.1.2 The dependent variable chosen here is the GDP growth per capita:

We find that the explanatory variables growth rate of developed countries and commodity prices are positive and highly significant with a t-stat and the probability of rejecting H0 is less than 5% of error. Identically Finance variable is highly significant but with negative sign in the model of GDP growth rate as the dependent variable.

If the variable is decomposed institutions, we observe that the same non-institutional variables are highly significant, but in the institutional variables, only two variables, namely "government effectiveness" and "political stability and reducing violence" are very significant and allow rejecting H0 at 5%. These very significant variables are the same as those of the model with growth rate of GDP as an explanatory variable. For the MENA region as a whole, non-institutional variables are highly significant to 5% with negative sign for Finance. The INSTIT variable (aggregated institutions) remains very low explanatory with a probability of 13% of error. If we break down the INSTIT variable, we also get a significance of non-institutional variables, but for institutions, we retain only the variable "political stability" as very significant.

We find for the other a negative sign and a lack of significance for "voice and accountability", "control of corruption", "government effectiveness" and "rule of law."
For the non-oil MENA, only the variable growth rate in developed countries is very significant at 5%. The price of raw materials is less significant. The aggregate institutional variable is still not significant.

If the institutional variable is decomposed, the only variables highly significant are growth rate in developed countries with a probability of 5% error, and "political stability" also with 5% of error. "Voice and Accountability", "control of corruption" and "government effectiveness" are not significant and have a negative sign.

For the oil MENA we find that the growth rate of developed countries is very significant, unlike all other variables. Commodity prices and Finance have a respective probability of error of 12% and 9%. If the institutional variable is decomposed, we find the "political stability" variable as the most significant at 5%. This finding joins the same as that of the non-oil MENA, about the role of institutions on GDP per head.

In Latin America, the decomposition of institutions variable does not change the significance of non-institutional variables and highlights only the variable "political stability" as very significant to 5%. We note that the variable "voice and accountability" is positive and weakly significant sign to 14% error and the variable "rule of law" and not meaningful negative sign to 18% error.

In Asia, only the variables growth in developed countries and commodities are very significant to 5%. Finance does not appear significant as well as aggregated institutions. The decomposition of the institutional variable does not change the significance of non-institutional variables that are developed countries growth and commodities. On the other hand we see that three institutional variables are very significant: "voice and accountability", "government effectiveness" that are a positive sign and "control of corruption" that has a negative sign.

2.2 Interpretation of the negative sign of the variable good governance

The presence of institutional variables negative sign leads us to ask ourselves the inverse relationship between governance and economic growth: it is in fact admitted by the studies done on "good governance" that improved its indices to be positively correlated with the growth of GDP per capita. But how could we explain the positive effect of these negative institutional indicators on economic growth?

Scholars such as Paul Bardhan (1997) and Bibel Ben Nahia (2008) show the possibility of a positive effect on FDI in the degradation of institutional variables as the "quality control" and "control of corruption". Indeed, the arguments show that corruption can be favourable to companies wishing to finance investment projects but come up against bureaucratic obstacles due to excessive government regulations. These companies are willing to pay a bribe to speed up administrative procedures. Paul Barhan (1997) believes that corruption in this form generates a time saver since it plays the role of facilitator in administrative proceedings. According Bibel Ben Nahia (2008) corruption can have a paradoxical effect since it can be as beneficial to foreign direct investment (FDI). Daniel Kaufmann (1997) also discusses this ambiguous effect of corruption which "lubricates the mechanism" or "greases the wheels". Other empirical work such as Peter Egger and Hannes Winner (2005) support the view of a positive effect of corruption on direct investments flows: their panel has 73 developed and developing countries which capture 90% of direct investments flows world over the period 1995-1999, using the data on corruption, Transparency International and the World Bank. The study shows that corruption can have a short-term positive effect on the entry of direct investment flows. Overall, this literature can help to provide explanatory elements to the negative sign of institutional variables such as corruption.
The negative sign was notably found in our estimates for Asia: the experience of Asia in terms of foreign investment showed that foreign direct investment flows have been enhanced by high levels of corruption.

Conclusion:

The work of descriptive and econometric analysis above is a contribution to the debate on institutional conditions for economic take off in developing countries. The results of our studies based on a sample of 45 developing countries, do not permit us to conclude as Kauffman and Knack on high significance in the relationship between "good governance" and economic growth: in fact, on the one hand all countries from all regions do not know the significance even on the same indicators: Asia and Latin America regions converge regardless of the model tested for the huge significance of the "voice and accountability" indicator. Nevertheless the two regions diverge for all models tested on other indicators. Latin America has a very strong significance of the "political stability and reducing violence" indicator (all models) and the "Rule of Law" indicator (for GDP per capital model). In the MENA region only non-oil MENA countries converge with Latin America for indicators of "political stability" in all models, and for indicator "rule of law" only in GDP growth per capita model.

The indicator that emerges in our estimates for its strong significance and this for all models and virtually all regions (excluding Asia) is the "political stability and reducing violence": the transversal application of this indicator allows us to conclude that improved political stability is a major institutional factor of growth and economic catch in developing countries.

The argument of the neo-institutional economists is that improving indicators of 'good governance' is a necessary condition for creating the institutional conditions of lowering transaction costs and thus a competitive market is conducive to increasing the efficiency in the allocation of resources and the pace of economic growth. However, this thesis supported by econometric work of Daniel Kaufmann and Stephen Knack was criticized by Mushtaq Khan especially since the good governance of fast-growing developing countries indicators are not significantly different from those of low-growth countries. The thesis of economic catch-up in developing countries by improving good governance index is weakened by this.

The thesis is more efficient when it comes to carry out economic reforms and improve governance indices and to improve the operation of an existing market economy as in the specific case of developed countries.

Nevertheless, this occults in developing countries, structural and institutional conditions in creation of a market economy and a capitalist economic system which implies a major social transformation and the emerging of formal and informal institutional framework. In this issue, the role of the state is crucial in order to drive economic development: state must acquire skills to orient capital into economic sectors with high added value and increase productivity. Khan developed for this purpose the concept of "political settlement" that is stable and consistent relationship between the distribution of political power, an institutional framework and economic growth in a country. Instead of "good governance" as a condition for economic growth, Khan replaces it by the notion of governance seen as redistribution of power to a stable political coalition whose interests coincide with those of the reform and restructuring of the economy, sources of growth and economic and human development.
Our work allows supporting the criticism of Mr Khan on the correlation between good governance and economic growth to the extent that our empirical results do not support the huge significance of the correlation nor its generalization to all developing country regions. So, economic growth and take off in developing countries can not only be explained by good governance indicators as given by institutional authors. Taking into account the complexity of the issues, including search and economic rent seeking in the relations between political power and coalitions functioning of the economy requires to develop a broader analysis of the concept of good governance to better understand the role of political and institutional factor in economic development.

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World Bank: « maintenir la reprise et aller au-delà : évolution et perspectives économiques de la région », MENA Region, janvier 2011

Latin America :

Asia :
Appendices

Indicators and figures related to our empirical study:

Table 3: test of stationary

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Figure 2: Finance indicators:
Figure 3: Raw materials indicators:

Figure 4: Growth rates in developed countries:
Figure 5: Growth rates in developed countries: