The diversity of emerging capitalisms

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Séminaire BRICs EHESS-FMSH
Paris, 26.01.2017
Background

Context
• ICATSEM project (FP7) on the Future of OECD capitalisms in a globalized world
• Growing awareness that alternative forms of capitalism are emerging in DCs
• Method = Comparison of national socioeconomic models of development

Our research question(s)
• Can we describe emerging market capitalisms by their institutional system?
• In what respect do emerging countries’ capitalisms differ from OECD ones?
• Do all emerging economies share a common model or not?
• What are the main correlates of these models?
• Are some of them more efficient in reaching economic development goals than the others?

Related literature and issues: Comparative Capitalism vs NIE
• Capitalisms analyzed as systems of sectoral institutions (Amable, 2003)
  → Asian varieties, Dependent Market Economies, Hierarchical Market Economies
• Institutional clusters matter more than one-dimensional institutions (Besley & Persson, 2012; Roland & Jellema, 2011)
• Ideal-typical approach (Hall & Soskice, 1999) vs inductive clustering (Amable, 2003)
• Institutional complementarities (Aoki, 2001) / Institutional hierarchy and long-term reinforcing factors (North, 1989; Acemoglu and Robinson, 2012)
<table>
<thead>
<tr>
<th>Institutional sector</th>
<th>Representative typology</th>
<th>Examples of performance effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate governance</td>
<td>Insider / Outsider or shareholder / Stakeholder</td>
<td>Firm strategy; income distribution; skills; investment; innovation</td>
</tr>
<tr>
<td>Inter-firm relations</td>
<td>Arm’s length relation / Obligational relation</td>
<td>Cooperation and competition; corporate governance; innovation</td>
</tr>
<tr>
<td>Work organization</td>
<td>Fordism / Flexible specialization / Diversified quality production</td>
<td>Business strategies; industrial relations</td>
</tr>
<tr>
<td>Industrial relations</td>
<td>Conflictarian / Pluralist / Corporatist</td>
<td>Internal vs. external labor market flexibility; wage levels; unemployment</td>
</tr>
<tr>
<td>Product market*</td>
<td>Liberal market / Regulated markets / Governed outward-oriented</td>
<td>Competition; competitiveness; innovation; quality; attractiveness</td>
</tr>
<tr>
<td>Labour-wage nexus*</td>
<td>Market-based flexible / Coordinated / Regulated</td>
<td>Internal vs. external labor market flexibility; wage levels; unemployment</td>
</tr>
<tr>
<td>Financial systems</td>
<td>Market-based / Bank-based / Bank-based with foreign banks</td>
<td>Investment pattern; corporate governance</td>
</tr>
<tr>
<td>Education and skill creation</td>
<td>Generic / Specialized</td>
<td>Income distribution; work organization; innovation; industrial relations; firms’ strategy</td>
</tr>
<tr>
<td>Welfare and social protection</td>
<td>Liberal / Conservative / Social Democratic</td>
<td>Labor market participation; patterns of savings and investment; organization of labor unions</td>
</tr>
</tbody>
</table>

*Additions to the table by Jackson and Deeg (2006); the additions are taken form Amable (2003); the institutional dimensions that are explicitly studied by Amable (2003), as well as the corresponding typology of sectoral models of governance, are reported in italics.
Our approach

- Analyzing DCs’ capitalism models as clusters of sectoral institutions

<table>
<thead>
<tr>
<th>Institutional sector</th>
<th>Our typology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial system</td>
<td>Mature market / Embryonic / Intermediated (repressed) / Idiosyncratic</td>
</tr>
<tr>
<td>Product market</td>
<td>Liberalized deregulated / Export-oriented / Statist partially liberalized / Statist protective / Idiosyncratic</td>
</tr>
<tr>
<td>Wage-labour and production relation nexus</td>
<td>Coordinated / Liberal / Paternalistic / Informal / Idiosyncratic</td>
</tr>
<tr>
<td>Skill creation and education system</td>
<td>Universal / Upgrading export-oriented / Neglected / Idiosyncratic</td>
</tr>
<tr>
<td>Social protection and welfare state</td>
<td>Decommodified / Liberal / Informal (remittance-based) / Social insecurity / Idiosyncratic</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Modern formalized / Dualistic / Traditional / Idiosyncratic</td>
</tr>
<tr>
<td>Environment</td>
<td>Effectively-governed / Biodiversity-focused / Weakly-governed / Idiosyncratic</td>
</tr>
</tbody>
</table>

- De jure/De facto institutional complementarities
- Functional/dysfunctional systems

<table>
<thead>
<tr>
<th></th>
<th>De jure</th>
<th>De facto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>LME, CME</td>
<td>Experimentation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chinese market socialism</td>
</tr>
<tr>
<td>Regressive</td>
<td>Washington Consensus</td>
<td>Reforms as signals</td>
</tr>
<tr>
<td></td>
<td>Patron-client systems</td>
<td>inconsistencies</td>
</tr>
<tr>
<td></td>
<td>Natural state</td>
<td>HME</td>
</tr>
</tbody>
</table>

- Allowing for idiosyncratism/hybridization → *Hybrid-Idiosyncratic* systems
Methodological aspects

The data
- 140 countries: OECD, DCs and LDCs / More than 1 million inhabitants; 2006-2008
- 81 variables pertaining to seven sub-sets of (measurable) institutional features (dimensions): Wage-Labour nexus, Financial system, Product market, Skill creation and education system, Social protection and welfare state, Land and agricultural regulation, Environmental regulation

The method
- Factor analysis / Mixed classification
- Two-tier methodological procedure
- Hybrid-Idiosyncratic cluster
- About 100 characterization variables: geographical features, overall governance indicators, long term historical features, democracy and constitutional features, cultural features and values, conflictuality, civil liberties

First step
- We first cluster economies according to their differences and similarities in each of the seven selected dimensions: identification and characterization of a few original "institutional models" in each dimension

Second step
- We assess the way these specific institutional models interact and constitute a system for each of the countries in the sample: identification and characterization of a few original and coherent "models of capitalism" which can be described by their own mix of particular "institutional models"
From basic initial quantitative information... (81 variables pertaining to 7 dimensions) ... to models of sectoral governance (31 sub-profiles)

- Labour and social relations
  Cross-sectional database
  → PCA
  → HCA / k-means
  → LSR₁, LSR₂, LSR₃, LSR₄, LSR₅

- Education
  Cross-sectional database
  → PCA
  → HCA / k-means
  → EDU₁, EDU₂, EDU₃, EDU₄

- Product market
  Cross-sectional database
  → PCA
  → HCA / k-means
  → PRM₁, PRM₂, PRM₃, PRM₄, PRM₅

- Social protection
  Cross-sectional database
  → PCA
  → HCA / k-means
  → SOC₁, SOC₂, SOC₃, SOC₄, SOC₅

- Financial systems
  Cross-sectional database
  → PCA
  → HCA / k-means
  → FIN₁, FIN₂, FIN₃, FIN₄

- Agriculture
  Cross-sectional database
  → PCA
  → HCA / k-means
  → AGR₁, AGR₂, AGR₃, AGR₄

- Environmental regulation
  Cross-sectional database
  → PCA
  → HCA / k-means
  → ENV₁, ENV₂, ENV₃, ENV₄

AN ORIGINAL CROSS-SECTIONAL NOMINAL DATABASE
(140 countries / 7 models of sectoral governance)

<table>
<thead>
<tr>
<th></th>
<th>Labour and social relations</th>
<th>Education</th>
<th>Product market</th>
<th>Social protection</th>
<th>Financial systems</th>
<th>Agriculture</th>
<th>Environmental regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>LSR₂</td>
<td>EDU₁</td>
<td>PRM₁</td>
<td>SOC₅</td>
<td>FIN₄</td>
<td>AGR₄</td>
<td>ENV₂</td>
</tr>
<tr>
<td>Algeria</td>
<td>LSR₅</td>
<td>EDU₁</td>
<td>PRM₁</td>
<td>SOC₅</td>
<td>FIN₂</td>
<td>AGR₃</td>
<td>ENV₄</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>LSR₃</td>
<td>EDU₂</td>
<td>AGR₄</td>
<td>SOC₃</td>
<td>FIN₄</td>
<td>AGR₂</td>
<td>ENV₂</td>
</tr>
</tbody>
</table>
Results (1): General pattern of clusterization

Stages of country clusterization

<table>
<thead>
<tr>
<th>1st stage</th>
<th>2nd stage</th>
<th>3rd stage</th>
<th>4th stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formalization</td>
<td>Informal</td>
<td>Informal</td>
<td>Informal</td>
</tr>
<tr>
<td>Informal</td>
<td>Hybrid-Idiosyncratic</td>
<td>Hybrid-Idiosyncratic</td>
<td>Statism</td>
</tr>
<tr>
<td>Transitional</td>
<td>Non-Experimental</td>
<td>Non-Experimental</td>
<td>Statist Resource-Dependent</td>
</tr>
<tr>
<td>Formal</td>
<td>Labour/Finance</td>
<td>LME</td>
<td>LME</td>
</tr>
<tr>
<td>Formal</td>
<td>CME</td>
<td>CME</td>
<td></td>
</tr>
</tbody>
</table>
Results (2): The 2 + 4 models of world capitalisms
**Results (3): Trajectories of institutional change**

**Comparative case-studies:**
Institutional trajectories and institutional complementarities

<table>
<thead>
<tr>
<th></th>
<th>De jure isomorphic</th>
<th>De facto polymorphic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>Brazil / Indonesia, Malaysia / Mexico, Statism</td>
<td>Brazil (Hybrid)</td>
</tr>
<tr>
<td></td>
<td>Cote d’Ivoire / Ghana, Informality</td>
<td>Malaysia (Globalization-Friendly)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ghana</td>
</tr>
<tr>
<td>Regressive</td>
<td></td>
<td>Indonesia (Informal outward-oriented)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico (Statist outward-oriented)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cote d’Ivoire (Informal, Weak state)</td>
</tr>
</tbody>
</table>
Results (4):
Progressive / regressive complementarities and socioeconomic models

- Institutional complementarities specific to each model
  - Informal (weak state)
  - Statist (resource-dependent)
  - Globalization-friendly
  - Hybrid-Idiosyncratic

- Institutional hierarchies
  - Fairness and security
  - Competitiveness

- Long-term reinforcing factors
  - Land, aridity, oil, ruggedness, tropics, demography, size, socialism, state antiquity, legal origins

<table>
<thead>
<tr>
<th>De jure</th>
<th>De facto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive</td>
<td>Low-income Statist (Resource-Dependent)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Regressive</td>
<td>Middle-income Statist (Resource-Dependent)</td>
</tr>
<tr>
<td>Informal (Weak State)</td>
<td></td>
</tr>
</tbody>
</table>
Results (5): Diversity and institutional reforms

- Top-down institutional reforms weakly effective ....
  - Benchmark / One-dimensional approach / “Mono-cropping”
  - Minimal enforcement of the *de jure* best-fitted institutions > than higher enforcement of any other alternative
  - Limited room for experimenting *de facto* institutional complementarities beyond LME/CME

- ... And yet high observed diversity and experimentation
  - Adaptative efficiency search → Partial tranplants and hybridization
  - Higher social acceptation of hybrid systems (survival of domestic institutions or values)
  - Weak commitment to reforming in DCs → reforms = signals and not effectively enforced rules
  - Leadership influence
  - Information problems (potential complementarity with remaining rules, interaction with the local culture and underlying structures of power and practices

- Conditions of success
  - Deliberation
  - High political support
  - Trial and error
  - Incremental innovation and adjustment of the existing system
Main conclusions

• “Conventional” institutional systems (I-WS, CME and LME) are well described by our methodological framework: Consistency.

• The bulk of emerging countries are located in two specific clusters (Globalization-Friendly and Statist-Resource dependent); they are mainly differentiated by the degree and style of state control.

• Some other emerging countries are experimenting their own original institutional configuration by constructing their institutional systems in a very singular fashion: Either hybrid or idiosyncratic forms of capitalism.

• Institutional systems are first differentiated by their degree of formalism, then, by the degree of experimentation and, to a lesser extent, by the type of State-Market articulation.

• There is not one unique path of institutional change leading to economic and social development.

• Ex-Socialist CEECs that entered European Union have almost all converged toward CMEs.

• There is no “Asian”, “African” or “Latin American model”.
Wage-Labour nexus: from 16 variables...

Labour force participation rate / Labour force participation (- 25 years/25-54 years old) / Labour force participation (women/men) / Child Labour Index / Share of working poor or In-work poverty (OECD) / Share of wage and salaried workers / Minimum wage normalized on GDP / Rigidity of hours / Difficulty of redundancy / Mandated cost of worker dismissal / Mandated cost of hiring / Hiring and firing regulations / Ratifications of ILO conventions / FA and right to CB / Collective bargaining centralization

... to 5 institutional models:

Coordinated/Liberal/Paternalistic/Informal/Idiosyncratic

Skill creation and education system: from 13 variables...

Public spending on education / Share of public spending on education (secondary and tertiary) / Share of school enrolment in private (primary and secondary) / Duration of compulsory education / Gender Index / Pupil-teacher ratio in primary education / School enrolment ratio in tertiary education / Average years of school / Percentage of technical and vocational enrolment / Percentage of science graduates / Percentage of engineering and production industries graduates / Number of H1-B visa (for speciality occupations) / Student in mobility

... to 4 institutional models:

Universal/Upgrading export oriented/Neglected/Idiosyncratic
Argentina provides an example of an institutional context in which coordinated labour institutions coexist with a high degree of noncompliance to state-enforced rules of social protection. Only half of the workforce obtains the entire benefits to which it is legally entitled (Ronconi, 2010).

Figure 4.3. Map of Labour market and production relations models

In sharp contrast with the coordinated and liberal models, informal labour governance is deeply embedded into social structures featuring extensive labour force participation, extended self-employment and low basic labour standards. Legal support for workers' organized collective action is very limited. In that unfavourable context, the high level of the minimum wage relative to the average income indicates that minimum wage acts as a norm that is probably different from the one conventionally attributed to it, i.e. providing income security for unskilled and unorganized workers. At the same time, since individual and collective terminations present a high degree of regulation, the mandated cost of hiring remains at a level below the rest of the world average. Moreover, informal labour institutions are generally correlated with negative migration rates. The high gender ratio of skilled emigration indicates that the proportion of the skilled workers who migrate is higher for women than for men. In other words, the brain drain from countries with informal labour institutions to advanced OECD economies exhibits a significant gendered dimension. The cluster composition shows that most Sub-Saharan countries, certain transition economies in East and South-East Asia (Cambodia, China, Lao and Vietnam), in Caucasus and Central Asia (Georgia, Tajikistan and Uzbekistan), and the poorest Latin American and Caribbean countries (Bolivia, Haiti and Paraguay) can be typified by the prevalence of such informal labour institutions.

In the case of Argentina, noncompliance is notably due to weak enforcement which is empirically approximated by the number of labour inspectors per worker.
Figure 5.3: Map of the models of educational and training governance

<table>
<thead>
<tr>
<th>Education</th>
<th>Upgrading export-oriented</th>
<th>Universal</th>
<th>Neglected</th>
<th>Idiosyncratic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Spending on Education</td>
<td>19.70</td>
<td>12.23</td>
<td>15.96</td>
<td>15.76</td>
</tr>
<tr>
<td>Public spending for secondary and tertiary</td>
<td>0.68</td>
<td>0.75</td>
<td>0.50</td>
<td>0.61</td>
</tr>
<tr>
<td>Private enrolment</td>
<td>16.53</td>
<td>11.06</td>
<td>19.90</td>
<td>10.13</td>
</tr>
<tr>
<td>Gender Index</td>
<td>101.10</td>
<td>105.62</td>
<td>83.98</td>
<td>100.19</td>
</tr>
<tr>
<td>Pupil/Teacher Duration</td>
<td>8.62</td>
<td>10.16</td>
<td>7.07</td>
<td>8.95</td>
</tr>
<tr>
<td>Technical/Vocational Science graduates</td>
<td>11.33</td>
<td>47.32</td>
<td>22.81</td>
<td>27.43</td>
</tr>
<tr>
<td>Engineering graduates</td>
<td>11.07</td>
<td>7.70</td>
<td>10.29</td>
<td>8.31</td>
</tr>
<tr>
<td>Mobility</td>
<td>153.70</td>
<td>1564.74</td>
<td>903.70</td>
<td>655.66</td>
</tr>
<tr>
<td>Years of Schooling</td>
<td>6.52</td>
<td>9.71</td>
<td>3.36</td>
<td>6.44</td>
</tr>
<tr>
<td>Tertiary Enrolment</td>
<td>23.90</td>
<td>61.47</td>
<td>4.65</td>
<td>29.40</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>12953.2</td>
<td>23654.36</td>
<td>1672.44</td>
<td>5653.64</td>
</tr>
<tr>
<td>HDI</td>
<td>0.66</td>
<td>0.81</td>
<td>0.38</td>
<td>0.62</td>
</tr>
<tr>
<td>Gini index</td>
<td>47.09</td>
<td>34.28</td>
<td>41.98</td>
<td>43.59</td>
</tr>
</tbody>
</table>

Notes: (1) Values that significantly differ from those of all other countries at a 5% level (independent samples t-test) are in bold; those at a 10% level are in bold and italics.

Data source: See Table A.5.1

These emerging countries have successfully developed universal educational models, thereby challenging the linear vision according to which tertiary education comes as a priority only for the countries that are closest to the technological frontier. Insofar as a large

On that vision, see Vandenbussche et al. (2006).
and intellectual property rights protection than is the case for the other clusters of non-developed economies (Table 6.4). Their retail sector is also significantly more concentrated than in other developing and emerging countries, indicating the existence of economic barriers to entrants in this sector and of a certain degree of organization of big companies to protect their markets against potential entrants.

Figure 6.4. World map of the competition and product market governance models

As for the biggest emerging economies, such as Brazil, China, India and Indonesia, they all fall into the two varieties of statist models. As shown in Table 6.4, these two models, namely the statist partially liberalized and the statist protected, exhibit significant differences as regards the extent of their red tape and market regulation (Price controls, Licence restrictions) and degree of protectionism (Trade taxes, Capital controls). Brazil, and smaller emerging countries, like Argentina, Indonesia, Korea, South Africa, Thailand and Turkey, belong to the former group, which is the less regulated and protected of the two, although still featuring relatively higher degrees of State interventionism, especially through State transfers and subsidies and FDI incentives. By contrast, China, Egypt, India, Iran, Russia and Pakistan have been grouped together as statist protected competition and product market models, together with a large number of poor developing countries. A common trait of these countries is that State intervention via administrative burden and direct intervention in the trade and production spheres has tended to thwart the emergence of an open competitive market.
Figure 7.4. Map of the social protection models

Cluster 1 -Decommodified social protection model (33 countries)
- Austria
- Czech Republic
- Hungary
- Malawi
- Slovenia
- Belarus
- Denmark
- Iceland
- Netherlands
- Spain
- Belgium
- Estonia
- Ireland
- Norway
- Sweden
- Bulgaria
- Finland
- Italy
- Poland
- Ukraine

Cluster 2 - Liberal social protection model (23 countries)
- Argentina
- China
- Macedonia
- Oman
- United States
- Australia
- Hong Kong
- Mauritius
- Peru
- Uruguay
- Azerbaijan
- India
- Mexico
- Russia
- Uzbekistan
- Brazil
- Kazakhstan
- Namibia
- Switzerland
- Chile
- Latvia
- New Zealand
- Trinidad and Tob.

Cluster 3 - Social insecurity model (44 countries)
- Afghanistan
- Dominican Republic
- Korea, Republic
- Rwanda
- Tanzania
- Bangladesh
- Ethiopia
- Lao
- Saudi Arabia
- Thailand
- Burundi
- Georgia
- Madagascar
- Senegal
- Turkey
- Cameroon
- Ghana
- Malaysia
- Sierra Leone
- Uganda
- Central African Republic
- Guatemala
- Mauritania
- Singapore
- United Arab Emirates
- Chad
- Guinea
- Morocco
- South Africa
- Venezuela
- Congo, Republic
- Guinea-Bissau
- Nigeria
- Sri Lanka
- Vietnam
- Congo, Democratic Republic
- Indonesia
- Pakistan
- Sudan
- Zimbabwe
- Côte d'Ivoire
- Kenya
- Papua New Guinea
- Syria

Cluster 4 - Informal (remittance-based) social protection model (18 countries)
- Albania
- Gambia
- Jordan
- Moldova
- Serbia Montenegro
- Armenia
- Haiti
- Kyrgyz Republic
- Nepal
- Tajikistan
- Albania
- Gambia
- Jordan
- Moldova
- Serbia Montenegro
- Armenia
- Haiti
- Kyrgyz Republic
- Nepal
- Tajikistan
- Albania
- Gambia
- Jordan
- Moldova
- Serbia Montenegro
- Armenia
- Haiti
- Kyrgyz Republic
- Nepal
- Tajikistan
- Albania
- Gambia
- Jordan
- Moldova
- Serbia Montenegro
- Armenia
- Haiti
- Kyrgyz Republic
- Nepal
- Tajikistan

Social protection
- Social insecurity
- Liberal
- Informal (remittance-based)
- Idiosyncratic
- Decommodified
Table 8.4. Classification of countries by cluster

Mature
Australia, Canada, Denmark, Finland, Germany, Hong Kong, Iceland, Ireland, Israel, Japan, Jordan, Korea, Rep., Lebanon, Luxembourg, Malaysia, Netherlands, New Zealand, Singapore, South Africa, Spain, Sweden, Switzerland, United Kingdom, United States

Intermediated (repressed)
Austria, Argentina, Belgium, Bangladesh, Bolivia, Bosnia and Herzegovina, Bulgaria, Chile, China, Colombia, Costa Rica, Czech Republic, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Finland, Georgia, Ghana, Guinea Bissau, Greece, Guatemala, Honduras, Croatia, Hungary, India, Iran, Italy, Jamaica, Kazakhstan, Kuwait, Latvia, Lithuania, Mauritius, Mexico, Namibia, Nepal, Norway, Pakistan, Panama, Peru, Papua New Guinea, Portugal, Russia, Saudi Arabia, Salvador, Slovak R., Swaziland, Thailand, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Uruguay, United Arab Emirates, Vietnam

Embryonic

Idiosyncratic
France, Gabon, Honduras, Croatia, Indonesia, Sri Lanka, Macedonia, Nicaragua, Oman, Philippines, Poland, Romania, Slovenia, Serbia

Note: Bold characters denote emerging countries, in the sense that they have been considered as such by at least one of the following institutions: Boston Consulting Group, BNP Paribas, IMF or Standard and Poor's.
The progressive inclusion of new types of actors in rural areas probably increases property rights insecurity, with traditional land rights systems, frequently informally guaranteed at local communitarian level, being progressively replaced by new better-established ones. It is worth noting that a similar phenomenon also tends to emerge in traditional agriculture countries, notably via the international land grabbing phenomenon.

9.5. CONCLUSION

The paper proposes a classification analysis of agriculture models based on a broad sample of countries and on the inclusion, in addition to more usual variables about productivity and the size of agriculture, of variables about land property rights, reflecting institutional aspects. The empirical strategy is based on the combination of PCA analysis and mixed classification analysis which generate endogenous multidimensional classifications.

The introduction of institutional variables adds key information for the understanding of agriculture models. As shown by PCA, institutional variables constitute, on their own, an axis of observed heterogeneity explanation. They consequently play a key role in differentiating agricultural models. Three agricultural models have been identified. The traditional and modern ones are clearly opposed with respect to both performance and institutional outcomes. The third model, named dualistic, is particularly interesting as regards property rights aspects.

Somewhat paradoxically, higher levels of agricultural performance are to be found in countries with higher land rights insecurity. The countries belonging to this group seem to be in a transition stage: changes in agricultural practices are undermining the traditional land right system’s capacity to guarantee smallholder’s land property, with these farmers’ investment and productivity being eventually depressed.

Concerning the endogenous dynamics of land property rights, we can formulate two hypotheses: (i) more adapted institutions have not yet emerged but are still to come, or (ii) insecurity could be a permanent characteristic in these countries or, at least, in some of them.
The emerging responsibility for global ecological stakes (such as greenhouse gas emissions, fossil energy consumption) of these countries should have prompted them to effectively establish more stringent environmental regulations. Unfortunately, however, they have kept on performing badly in terms of environmental regulation. As a consequence, their growing involvement in international agreements has been interpreted, at least for the biggest emerging countries, as a means of reinforcing their emerging diplomatic power (Papa and Gleason, 2012). This seems to be the case for China in the domain of green technologies. In fact, it is not clear whether that trend of growing international involvement will really help public authorities, or provide them with additional incentives, to implement effective internal policies. Even though pollution is on the increase and ecological constraints become more severe with greater wealth accumulation, economic growth and poverty alleviation remain the top priority of most developing countries' governments (Andresen, 2007). In our empirical results, the indicator for environmental regulation effectiveness is not statistically significant. The countries of this cluster also fail to involve their private sector, perhaps because of their international strategies. Very often, their specialization in world trade is based on their comparatively low costs. In the environmental sector, this strategy prompts low-cost firms to let environment-related external costs remain uncontrolled.

The countries of the biodiversity-focused cluster, just like those of the weak-governance model, are characterized by weak environmental governance and a particularly low degree of private sector involvement in ecological awareness and protection. At the same time, however, this group is more involved in international regulation than the weakly-governed countries, which indicates the emerging global political responsibility of its members. The third cluster is clearly the group of the more environmentally friendly systems. Not surprisingly, almost all rich and industrialized countries belong to this cluster. Argentina is the only non-European emerging economy to be found in this group. The effectively-governed
<table>
<thead>
<tr>
<th>Country</th>
<th>Agriculture</th>
<th>Competition</th>
<th>Education</th>
<th>Environment</th>
<th>Finance</th>
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