A Comprehensive Conceptual Model for Analytical Institutional Economics

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The outline

1) Introduction: Analytical Institutional Economics (AIE) as the most directly applicable branch of Institutional Economic, but still in need of conceptual precision and a clear overview

2) Providing AIE with a solid conceptual basis: the IF-ON model

3) Refinement 1: Distinguishing types of institutional rules and frameworks

4) Refinement 2: Distinguishing layers of economic change and classifying economic analyses

5) How the IF-ON model brings together North, Williamson, and Acemoglu, Johnson and Robinson

6) A few lessons for comparative economics and analysis of economic policies

7) For interested economists only: how the IF-ON model leads to Generalized Darwinism and to the Mecca of Alfred Marshall
1) Introduction: **Analytical** Institutional Economics (AIE) and its two weaknesses

- **IE**: long history, now a rapidly growing and ramifying field
- **Two weaknesses:**
  -- vagueness or ambiguity of some of the basic concepts
  -- fragmentation: different specialized studies but no overall view
- **The aim of this paper**: to diminish these weaknesses for one special branch of IE, defined as **Analytical IE** (AIE), by means of a comprehensive conceptual model
Identifying AIE

**Definition 1**: an economy’s institutional framework (IF) = all of its institutional rules, both formal and informal

NB: no use for the word ‘institutions’ - found irremediably ambiguous!

**Three questions about IFs:**

Q1: What are the effects of different IFs on economies?

Q2: How do IFs evolve?

Q3: How can the IF-evolution be influenced by policy?

**Definition 2**: **AIE** = all analyses seeking to answer at least some part of some of these questions

(AIE leaves aside critical, ontological, taxonomical and philosophical essays, but overlaps with Law and Economics, and Constitutional Economics)
2) Providing AIE with a solid conceptual basis: the IF-ON model

- Standard core: an economy = a collection of acting and interacting individuals, each pursuing certain objectives with certain rationality
- Less standard: the objectives may be changing & be partly altruistic; the rationality is unequally bounded across the individuals

Definition 3: An economy’s Organizational Network (ON) = the collection of all of its markets and organizations, both private and governmental, with their individuals and their interconnections
Admitting unequally bounded rationality (competence, talents):

A step beyond Simon, Kahneman and Tversky → human rationality not only bounded, but moreover unequally so → a scarce resource in need of efficient allocation in society (Pelikan 2007, 2010)

Why unequally bounded rationality cannot be ignored:

- Efficient incentives and available information may not suffice if rationality is bounded
- Only some individuals may suit the top jobs in an efficient ON
- Many may harm themselves and/or others by wrong consumer choices

→ Solutions by IF, not by individuals (their rationality?)
The IF-ON model: the main chains of effects

- The actual IF → shapes the individuals’ behaviors → they form & operate the ON → makes the economy perform → the actual output
- the actual output → the political support of the formal IF → withdrawn if government finds it too low and/or unacceptably distributed → a reform of the formal IF by legislation
- the effective new IF depends on the formal reform & the underlying informal IF
- the informal IF changes “spontaneously” by socio-cultural innovators and imitators, possibly influenced by the formal IF (but how?)
3) Refinement 1: distinguishing types of institutional rules and frameworks

Distinction A: an economy’s IF vs. its organizations’ internal IFs

- If the ON contains organizations → need to distinguish the overall econ-IF from the internal org-IF of each organization:
  - the econ-IF constrains the choices of the org-IF (e.g., corporate law constrains the forms of corporate governance, may even determine)

Distinction B: market-IF vs. executive government-IF

- ON with executive government → distinguish gvt-IF from mrkt-IF
  - the gvt-IF delimits the government economic agenda = allowed policy instruments with limits of their uses (from zero in a perfect laissez-faire, to all economic decisions in a fully command economy)
4) Refinement 2: Distinguishing layers of economic change and classifying economic analyses

Layers of economic change:

(I) Resource-allocation – production, transactions and consumption – within a given ON, and a given IF

(II) Development of ON – entry, growth or exit of firms; changes of technologies; opening and closing of markets; growth or shrinking of government within a given IF

(III) Evolution of IF – changes of formal institutional rules by known legislators and/or judges & changes of informal institutional rules by anonymous sociocultural innovators and imitators
classification of economic analyses

- Analysis of (I) = institutional and organizational **statics** (most of standard analysis)

- Analysis of (II) = institutional **statics** with organizational **dynamics** (e.g., developmental analysis, Schumpeter’s creative destruction)

- Analysis of (III) = institutional **dynamics**, evolutionary economics proper

**NB:** economic **development** distinguished from economic **evolution**
(→ Schumpeterian economics is developmental, not evolutionary)
5) How the IF-ON model brings together North, Williamson, and Acemoglu, Johnson and Robinson

• **North** mainly about econ-IFs: performance and growth of economies
  • **Williamson** mainly on org-IFs: sizes of firms and corporate govenance
Main link: econ-IFs constrain both the sizes of firms and their org-IF
Both belong to economic AIE: economic IFs $\rightarrow$ economic behaviors $\rightarrow$ the economy’s performance (via incentives, esp. transaction costs)
  • **Acemoglu, Johnson and Robinson** belong to political AIE: political IFs $\rightarrow$ political behaviors $\rightarrow$ the choice of the government $\rightarrow$ its choice of the economic IF $\rightarrow$ the economy’s performance
The same end, but differently remote beginnings: political AIE includes economic AIE
Which AIE can help with what?

Political AIE → how to choose the government? → which political IF?
can be made by the citizens at large (not in dictatorships) and/or the
incumbent government (not in democracies)

Economic AIE → how can government help the economy perform →
which formal economic IF?

NB: Helping the government choose this IF, and the citizens critically
evaluate it, is purely a matter of Economic (and not Political) AIE

But: what does economic AIE actually know? and what of this is known
to the government?
Difficulties of Political AIE with accommodating Economic AIE

Acemoglu et al. (2005) : “Economic institutions determine the incentives of and the constraints on economic actors, and shape economic outcomes. As such, they are social decisions, chosen for their consequences.”

But 1: Economic “institutions” (= IF) are not simple decisions, but outcomes of a complex evolutionary process, only partly influenceable by policies

But 2: The consequences of policies may only be believed, but the belief may be more or less wrong: depends on the state of the art of the Economic AIE and the knowledge of this knowledge by governments → assuming the consequences known makes Economic AIE jobless!

E.g.: Ignorant democratic governments that ruined their economy, and enlightened authoritarian rulers who helped → political democracy need not cause economic growth – contrary to the popular hypothesis of Political AIE
6) A few lessons for comparative economics and policy analysis

The main departure from standard analysis:

- An economy’s **ON** is not an exogenous constant, possible to assume ideal (e.g., with perfect firms), but a variable depending on the **IF**

- For evolutionary sustainability, the **IFs’** effects of **ON**-development are much more important than their effects on resource-allocation within a given **ON**

- Given inevitable uncertainties, **ON**-development must proceed by trials-and-errors → the relevant rules of the **IF** influence the variety of possible entreprenurial trials & the strictness of the correction or elimination of errors, including c-d gaps
Lessons for comparative economics

• The ‘species’ of economies (e.g., types of capitalism, socialism, welfarism) can more precisely be classified by their relatively more stable IF than by their endogenously changing ON.

• Compare IFs not only for their effects on resource-allocation within an idealized ON (e.g., plan vs. markets), but also and above for their effects on ON-development, through the conditions of both entry and exit, including the defenses against c-d gaps (e.g., compare socialist vs. private ownership of capital).
Important case: The Final Answer to the Socialist Controversy

- for resource-allocation: plan can be as efficient as markets
- for **ON**-development: private and **tradeable** ownership of production capital is **doubly superior** to all forms of socialist ownership

Compelling empirical illustration: unification of German economies
- easy to replace plan by markets
- difficult to bring into being high quality firms: compared to West German firms, the East German ones developed into much large sizes (in average more than 10x) and much lower productivity (< 25%)
Lessons for analysis of economic policies

For institutional policies (= legislation modifying the IF)

• Create and protect favorable conditions for entrepreneurial trials
• Create and protect strict selection of socially efficient successes, and forceful correction or elimination of socially wasteful errors, including costly competence-difficulty gaps, including the government ones
→ both may require antitrust, better approximate than none

For executive policies (= uses of policy instruments defined by the IF)

• Attention to their effects on ON-development (“adaptive efficiency”)
• Do not blindly optimize of the use of any policy instrument, without first checking its safety = its c-d gaps? its scope for corruption?
Example 1: Selective industrial policies

Frequent argument: selection by product markets is too slow, prevents future winners to grow fast enough, and allows future losers to keep wasting resources too long \(\rightarrow\) the need for industrial policy, to help the growth of the winners and the exit of the losers.

**AIE/ON-development argument:** distinguishing future winners from future losers is not easy \(\rightarrow\) no one can do it perfectly, but politically selected industrial policymakers are likely to do it less well than private investors ("risk-capitalists") selected by competitive financial markets.

\(\rightarrow\) Most promising policy: make and keep financial markets competitive enough to keep selecting the right investors ("industrial policymakers")
Example 2: The social efficiency of very large firms

**Classical argument:** hostility to large firms because of the welfare losses due to their expected over-pricing

**AIE/Transaction-costs argument:** more hospitality, large firms defended if such losses are over-compensated by their savings on transaction costs

**AIE/ON-development argument:** back to more hostility – “too big to fail” firms harm ON-development by hindering market competition and selection, hiding inside their possibly growing competence-difficulty gaps, and sending the bills for their errors to the taxpayers

→ **Most promising policies:** antitrust slowing down M&A, cutting down too large firms – even only roughly, and not optimally
Example 3: Government regulations of the financial sector

Classical view: financial markets = efficient devices for allocating investment

AIE/ON-development argument: the financial markets are moreover devices for selecting the investors, and may not be efficient:

- The selection hindered by financial firms grown “too-big-to-fail,” allowed to grow inefficient, while hiding and protecting their internal c-d gaps

- The incentives and selection criteria may be disconnected from social efficiency, rewarding and selecting for socially less valuable investing – e.g., high-frequency trading rather than fundamental investing

- Government not competent enough for details of investment banking,

→ Most promising policies: antitrust for banks, and redressing incentives and selection criteria by a small FTT (“to calm the rich, not help the poor ...”)
Cf. J.S. Mill (1861) in Considerations on Representative Government:

“The positive evils and dangers of the representative, as of every other form of government, may be reduced to two heads:

first, general ignorance and incapacity, or, to speak more moderately, insufficient mental qualifications, in the controlling body;

secondly, the danger of its being under the influence of interests not identical with the general welfare of the community.”

Different views of government in a nutshell:

J.S. Mill: warns against Low Relevant Rationality & Selfish Motivations

Classical welfare economists: assume High-RR & Pro-Social-M (naïve)

Public Choice: assumes High-RR & Selfish-M (cynical?)

Unequally Bounded R: recognizes Low-RR, admits Pro-Social-M (diplomatic?)
7) For interested economists only: from the IF-ON model to Generalized Darwinism, and to the Mecca of Alfred Marshall

- the **IF-ON** model logically corresponds to the **genotype-phenotype** model of evolutionary biology → both are **special cases of Generalized Darwinism**: Instructed self-organizing of basic interactors (molecules, individuals) that form and develop complex interactors (phenotypes, economic organizations) → **generalized ontogenesis**

- imperfectly informed trial-and-error search (variation & selection) for the instructions (genomes, **IFs**) that can make the complex interactors evolutionarily successful → **generalized phylogenesis**

- But many **quantitative differences**: in relative speeds, in number of trials → The IF-ON model is a promising means for attaining the Mecca of Alfred Marshall: building economics as a biological science
Basic references


