

Definitions

$$ISI \equiv \frac{(P_d / P_w)_{icg}}{(P_d / P_w)_{eg}} \text{ significantly } \neq 1$$

$$TL \equiv \frac{(P_d / P_w)_{icg}}{(P_d / P_w)_{eg}} \cong 1$$

$$EOI \equiv \frac{(P_d / P_w)_{icg}}{(P_d / P_w)_{eg}} \equiv 1$$

These definitions abstract from variance across industries and commodities; hence, they exclude the possibility that the trade regime is simultaneously ISI and export oriented.

where ISI, TL and EOI stand for import substitution industrialisation, trade liberalisation and export oriented industrialisation respectively; P is price; and subscripts d, w, icg and eg stand for domestic, world, import competing goods and exportable goods.

Impact of ISI on growth

Slow growth

ISI leads to slow growth (if not absolute decline) of exports and growth of imports of capital and intermediate goods, because of the narrowly specialised, import dependent structure of non-industrial economies.

This leads to ***widening of the forex gap***, simultaneously with ***growth becoming contingent to ability to import***.

ISI increases the capital/output ratio, due to shifting technology towards capital-intensive methods of production that are linked with industrialisation.

This leads to ***widening the savings gap***, simultaneously with ***growth becoming contingent to increasing rates of investment***.

ISI increases demand for skilled labour because of shifting technology towards capital-intensive methods of production, at the same time that the starting economic structure is skewed towards the supply of unskilled labour.

This leads to three bottlenecks: *unemployment, declining domestic demand and market size, and inflation of skilled labour wages* – hence preventing the economy from becoming more efficient.

ISI does not help markets to increase because of unemployment and low income for unskilled and agricultural workers, and lack of incentives to export.

This leads to either *monopoly related inefficiencies, or size inefficiencies, or under-utilisation of installed capacity*. In any case, new installed industries are unlikely to progress along a steep learning curve (or cost reduction curve).

ISI also increases bureaucratic power associated with bureaucratic authority in selection, approval of decisions and actions (import/export decisions, licensing, etc.), bureaucratic controls, etc.

This leads to *rent seeking and waste of resources, information inefficiencies* and, overall, *increasing tension between the private sector and the government*.

The combined effect of forex gap, savings gap, skill gap, unemployment and low income, small markets and associated inefficiencies, and bureaucratic power is that *overall rates of economic growth slow down or decline in absolute terms* under ISI.

Critique of the argument (my critique):

- 1) Krueger aggregates analysis of “price distortion”, which does not allow her to understand firm/industry discrimination and the essence of selective policy;
- 2) Hence, Krueger assumes that ISI and EOI are mutually exclusive – thus, her point about ISI having to result in the widening of the forex gap;
- 3) Krueger discusses ISI within a very static framework – “other things being equal”, more industry means an increasing capital and skill gap, markets do not expand sufficiently, etc. She does not envisage the possibility that what she considers “obstacles” to industrialisation (capital, market and skill gaps) be addressed endogenously by the dynamic process of accumulation and transformation that industrialisation may introduce. ISI may increase profits, taxes and wages, therefore leading to more savings and investment – resulting from both higher productivity and increased confidence; ISI may also increase domestic demand (network of suppliers and linkages) and, relaxing the assumption of mutual exclusivity between ISI and EOI, may increase exports. It has been shown that industrialisation creates institutional and technological capabilities, as well as labour skills;
- 4) For Krueger, market power is synonymous of both state intervention and of economic inefficiency – but innovation is related to rents and market power, industries generally involve economies of scale (which lead to market power), and states and markets are not independent, a-social and mutually exclusive entities.

Short term costs of ISI

ISI entails the following short-term costs that have to be reduced (or eliminated by abandoning ISI):

- short-term production and investment opportunity costs and job losses – resources could be allocated more efficiently;
- higher costs and lower quality of domestic supplies if compared to world supplies;
- losses from trade (allocative) distortion: export losses, consumer welfare losses (higher prices, rationing, quality losses), imperfect competition, etc;
- losses from red-tape (delays, bottlenecks in supply, imports, exports, etc);
- corruption and rent-seeking.

Critique:

- 1) None of the above mentioned problems is specific to ISI, and ISI does not have to result in any of the above mentioned problems (although it could happen);
- 2) Inefficiencies with respect to investment decisions are higher in the longer term, and no strategy is error proof;
- 3) Krueger confuses ISI/EOI with state/market debate; in addition to ISI and EOI not being mutually exclusive, none of them is less/more state or market oriented by definition;
- 4) Krueger's allocative losses are misleading: what she calls "losses" is nothing but a change in income distribution;
- 5) Allocative losses are not compared with allocative gains (for example, acceleration in the rate of capital accumulation, innovation, etc.).

Long-term (dynamic) costs of ISI

- shifting resource allocation away from *comparative advantages* (unskilled, cheap labour), towards capital intensive patterns of production – this is because "easy" ISI (labour intensive) are exploited and exhausted first and the shift towards more complex, capital intensive activities is inevitable;
- ICOR increases and so real investment and growth rates decline for a *given rate of savings*;
- *small market* for complex goods due to *low income*;
- knowledge accumulation due to interaction in the export/import market may be reduced (embodied knowledge in imports; acquired knowledge due to learning and experience);
- feedback mechanism is slower: government is not as concerned as it should be with exchange rate overvaluation; infra-structure bottlenecks are not revealed as quickly, etc.

Critique:

- 1) How different is the short and long-term analysis of costs? Most of what Krueger considers “long-term” costs can be incorporated into what she calls short-term losses from trade distortion. This is because she confuses ISI/EOI debate with state/market one;
- 2) How can Krueger discuss dynamic costs of ISI, when her analysis is based on static “comparative advantages”, “given rate of savings”, given “small market” and “low income”? How does she define “dynamic”?
- 3) What’s the problem with “exhaustion” of “easy” ISI? Isn’t it at the core of the neo-liberal argument about industrialisation in South East Asia? Isn’t it at the core of the H-O argument about factor price equalisation and convergence of production patterns? What happens to factor proportions as “easy” ISI are exploited and exhausted, don’t they change? And what is the meaning of “easy” ISI? Why is it supposed to be “easy” to substitute labour intensive goods?
- 4) ICOR is a ratio between capital and output – capital intensity is not the only determinant of ICOR, but the ratio between capital and output. Hence, if productivity increases fast – for example under increasing returns to capital as predicted by endogenous growth models – ICOR may not increase at all. Unless Krueger is confusing short and long-term again;
- 5) As industrialisation progresses, productivity and incomes tend to increase, and so does specialisation and the network of suppliers – hence, markets tend to expand. Even if there are many cases where these dynamic effects did not happen under ISI, there is no case where they did happen without ISI. Hence, while Krueger is right to say that one cannot simply assume that the dynamic linkages will happen with ISI, she is wrong in assuming that they will not happen with ISI, or can happen without ISI;
- 6) Knowledge accumulation is a function not only of trade, but it is mostly a result of, and contributor to specific production and education patterns (including, obviously, interaction with the world). The experience and knowledge acquired through selling or producing computers, or through producing and selling ginned cotton or fruit juices are very different in intensity, content and purpose. Moreover, knowledge spills-over through research and innovation effort, within and between institutions; it is not an automatic outcome of ISI, EOI or any other trade policy. Furthermore, knowledge is not an aggregate black box, which exists and is available off the shelf, and that can easily be communicated and acquired and applied everywhere – if one wants to produce computers, there is not much useful “knowledge” one can learn from exporting raw cashew nuts, ginned cotton or unprocessed minerals. One can assemble computers even if one knows little about the quantum physics theories underpinning the computer technology. Experience acquired from trading in the sugar or cashew nut industries may be of very little use for the development of a basic metals or metal-engineering industries. Additionally, ISI does not prevent linkages to the world; it only re-shapes the linkage.
- 7) If Krueger really wishes to raise the issue of knowledge acquisition as a positive externality, she has to explain what is positive about it. Mainstream, endogenous growth models in economics argue that knowledge

accumulation results in increasing returns to capital. If this is the case, Krueger's ICOR argument (ICOR being positively and directly related with capital intensity) makes no sense;

- 8) Why has the feedback mechanism to be slower? It is likely to be faster when it comes to the factors that affect the performance of firms, industries or activities targeted by strategy, being it a macroeconomic variable (such as the exchange or the interest rate), or an asset building one (training, technology selection and adoption, etc);
- 9) Why aren't infra-structural bottlenecks revealed under ISI? Doesn't industry require infrastructures? Where does the assumption that ISI requires no transport and marketing facilities come from?

Trade liberalisation

Trade liberalisation creates the conditions for the entrepreneurial spirit to thrive, comparative advantages to be revealed and taken advantage of, and resources to be efficiently allocated thus reducing the economic costs of economic progress. Access to cheap, better quality imports at the right exchange rate increases the competitiveness of domestic production.

In addition to trade liberalisation, it is important to reduce transaction and bureaucratic costs of making and implementing investment decisions; in other words, make investment easier for investor. In this connection, policies that support trade liberalisation are:

- exchange rate devaluation and liberalisation of the foreign exchange market (determination of the exchange rate and access to forex);
- removal of red-tape, including such things as licensing, administrative controls, quotas, etc;
- removal of regulations, particularly with respect to labour market regulations that reduce labour and wage flexibility;
- provision of infrastructures;
- and provision of tax reform, shifting away from direct (corporate) to indirect (consumption) taxes.

EOI is better than ISI because ISI is a failed strategy in the long run. SEA economies grew faster once they moved away from ISI to EOI. Trade liberalisation is at the core of this shift.

Critique:

- 1) Can liberalisation reverse production patterns that have been built under ISI?
- 2) If the answer to the above question is "yes", is it desirable, and attainable, to shift the production patterns to the state of the economy prior to ISI?

- 3) How much autonomy a state, and any other economic agent, has on the choice of trade strategy? By choosing to support investors in the national economy, is the state operating on its own or is it trying to address the interests of capital as well as social pressure for job creation?
- 4) How realistic is the assumption of continuous increases in export revenue under narrow specialisation?
- 5) If the idea is to make investment easier for investors, why isn't the coordination mechanism as well the access to capital, technology and skills addressed?
- 6) Is the devaluation of the exchange rate, on its own, an efficient mechanism for re-allocation of resources?
- 7) How can the state provide infrastructures without determining priorities, purposes and targets or, in other words, policy and strategy? Are infrastructures another black box? In brief, isn't the neo-liberal rationale of state provision of infrastructures based on the desire to reduce costs and long-term commitment of capital (hence, increase capital's flexibility) and solve the coordination and strategy problem?
- 8) Why is Krueger so cautious about discussing openly the problems of accelerating capital accumulation? On one hand she wants to remove any obstacle to fast capital accumulation (labour regulation, standards, social policy, corporate taxes, etc.), to increase the efficiency of the economy. On the other hand, she refuses to admit the role that may be played by ISI in accelerating capital accumulation and shaping its structure and dynamics. Finally, it is obvious that capital accumulation is the goal *per se*.

Overall final critique:

- 1) ISI and EOI are not mutually exclusive, nor does ISI necessarily imply the absence of trade. Krueger missed an opportunity to discuss, for example using the SEA cases, how these strategies can be related and how a move from one to another may be associated with agents, but also with linkages, and with the dynamic relationship between the two;
- 2) ISI/EOI, state/market and short/long-term debates are confused and very confusing. Above all, Krueger does not seem to have an adequate perspective of what dynamic and long-term actually mean;
- 3) Decisions about strategies that influence income distribution are bound to be political – not in the sense that they are taken by the state, but that they reflect the political dynamics of specific societies, and also influence such dynamics. Hence, it can barely be said that one decision is more or less “efficiency promoting” than another, because in a socially and politically heterogeneous society efficiency is a relative concept;
- 4) Krueger's analysis is exclusively focused on exchange relationships starting from a Pareto optimal allocation in a perfectly competitive model. Of course, a move away from that state of the world creates distortions and challenges. The issues at stake are whether Krueger's world is relevant; and whether the “distortions” and “challenges” aren't necessary for anything interesting to be able to happen;
- 5) Krueger does not really provide any interesting insight on how trade liberalisation may address the catching up issue problem faced by the

majority of LDCs. She assumes that trade liberalisation is good for growth because it shifts the economy to a state that is not influenced by the failed strategy of ISI. She never actually explains in a convincing manner how production patterns are reversed through liberalisation. And, apart from saying that if it is not ISI it is better than ISI, she never actually explains, in a convincing manner, why the world outside ISI is any good. It is not enough to say that given that ISI is bad (she does not even prove that this is the case), anything else is better.