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## **ECONOMIC NOTES**

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### **INDUSTRIAL POLICY: A SURVEY OF INSTITUTIONAL CHALLENGES**

**Godofredo Ramizo Jr.**

Industrial policy can be defined as the government's use of its authority and resources to foster industry development, to intervene with private sector weaknesses or to create growth in selected areas (Okimoto, 1989:8; Pack & Saggy 2006: 2). Policy instruments range from subsidies, cheap financing, export incentives and tax breaks, to trade protection, and state-sponsored innovation R&D, among others. The use of these industrial policies defies the neoliberal orthodoxy which prescribes free markets, relegates the state to a regulatory role, and claims that state intervention would be derailed by selfish interests (Stein, 2012:421-440; Cudworth, 2007:243-245).

The rapid industrialisation and economic growth of countries such as Japan, South Korea, and Taiwan after World War II have been associated to a certain degree with industrial policies (Johnson, 1982; Okimoto, 1989; Rodrik, 2007; Wade, 2004). Admittedly, industrial policies have yielded disappointing or uneven outcomes in other places, such as countries in Latin America, and Asian-Pacific countries such as India and the Philippines (Bell 2002; Wade, 2010:156; Rodrik, 2007:106). In Australia, as elsewhere, the experience of industrial policy has been controversial: over much of the twentieth century industrial policies eased balance of payment problems and generated significant employment, yet ultimately low productivity and weak competitiveness endangered the sustainability of state-supported industries (Conley and van Acker 2011). This variety of experiences has generated scrutiny into the challenges facing the effective implementation of industrial policy.

A compelling argument in the literature comes from the synthesis of Evans and Rodrik's work, which holds that the main challenge facing industrial policy is the need to create institutions which balance (a) the bureaucracy's authority to implement merit-based policies underpinned by accountability with (b) the embeddedness of the bureaucracy in public-private linkages which provide useful information to bureaucratic decision-making (Evans, 1995; Rodrik, 2004, 2007). Complementing this high-level argument, the literature has also yielded numerous specific findings with relevance to institutional challenges facing industrial policy.

This article is written in the belief that the accumulated knowledge arising from political economic research on these issues must be made more accessible to policymakers and non-academic audiences. This survey collates numerous insights in the literature and weaves them into five major themes. These include: difficulties in establishing bureaucratic authority; the threat of external interference; problems of accountability and institutional design; unfavourable socio-cultural or historical pre-conditions; and incompatible political economic structures. Many of the examples are drawn from Asia-Pacific but examples from other countries are cited where relevant. The intention is to provide a concise overview of the institutional hurdles facing effective industrial policy. Policy makers need to be aware of these pitfalls so that they can seek to overcome them. The next section of the article presents the rationale for industrial policy and describes key institutional characteristics.

### **Industrial Policy: Rationale and Key Characteristics**

The myriad arguments supporting industrial policy can be summarised as follows. First, mounting empirical evidence indicates that industry diversification is associated with economic growth for most developing countries (Imbs and Wacziarg, 2003; Rodrik, 2007:103), rather than static specialisation based on the free-market view of comparative advantage. Successful industrialisers, such as Japan and South Korea, actively used industrial policy to discover potential growth sectors (Hausmann and Rodrik 2003:607-627), and to stimulate new areas of comparative advantage (Johnson, 1982; Rodrik, 2007:103). Second, firms underinvest in training due to the risk of employee turnover – a market failure which warrants state intervention (Grossman, 1990:109).

Third, the inhibitive cost of failure and uncertainty of rewards discourage many firms from creating new technologies – a situation called technological externality (Rodrik, 2004:5). Fourth, the unsocialised cost of failure and the risk of imitation discourage private entities from discovering which pre-existing products can be manufactured domestically at a profit – a situation known as informational externality. Fifth, the state is most suited to address coordination externality, which refers to the absence of simultaneous, large-scale investments in complementary areas of the economy (Rodrik, 2007:104-107). Industrial policy can address these market dysfunctions by sharing the risks and costs of research and product discovery, and by financing socially important areas suffering from under-investment.

Experience shows that industrial policy is best administered by a specialised bureaucracy rather than by legislative elites with explicit political interests, or *ad hoc* working groups diffused throughout the bureaucracy (Johnson, 1982:315; Leftwich, 2000:155). This specialised bureaucratic unit must maintain the authority to make decisions based on coherent organisational goals, implement them through credible policy instruments, and enforce accountability. However, it must simultaneously be embedded in a dense network of social ties which provides institutionalised channels for state and society to continually share informational leads regarding opportunities and constraints (Evans, 1995). Bringing about such balance through institutional arrangements is fraught with challenges.

### **Challenges Facing Institutions of Industrial Policy**

Institutions are formal and informal constraints on human behaviour. Formal institutions include mandated organisations, whereas informal institutions comprise uncodified norms. The challenge in industrial policy is to configure these constraints to create balance between bureaucratic authority and embeddedness; bureaucrats must benefit from information shared by social linkages, without losing authority. This is synonymous with ensuring that state goals (such as efficient and widely enjoyed outcomes) win over select private interests. This section analyses institutional impediments by reconstituting the literature's wide variety of arguments and counterpoints into five coherent themes: the difficulties in establishing bureaucratic authority, the threat of external interference,

problems in accountability and institutional design, unfavourable socio-cultural or historical preconditions, and incompatible political economic structures.

### **The Challenge of Establishing Bureaucratic Authority**

Creating a specialised bureaucratic institution with explicit goals toward industrialisation necessitates sufficient concentration of state capacity within the state apparatus. When this institution is created via decree, it carries the weight of state authority and instrumentality. The failure to consolidate the basic purview of state capacity – such as the monopoly of legitimate violence, political recognition from the state’s citizens, and the exercise of an effective taxation regime – handicaps institutions at the onset (Leftwich, 2005:578-597). The state must also create a conducive environment where contracts are enforced, property rights are respected, laws are upheld, and infractions are met with prosecution (Hughes & O’Neil, 2008:38).

The authority vested by the state in this specialised institution is best wielded and defended by qualified bureaucrats who are recruited through merit and are prestigious enough to protect bureaucratic authority from the interests of political and business elites (Johnson, 1982:315; Shaw & Hughes, 2002:211). The respect enjoyed by Japan’s Ministry of International Trade and Industry (MITI) – the government’s nerve centre of industrial policy – was partly due to the calibre of its technocratic staff who were selectively recruited from the nation’s most prestigious universities (Callon, 1995:186; Okimoto, 1989:113). Given that industrial policy requires a competent technocratic staff composed of well-educated professionals (Patrick, 1986:19), countries face constraints when the available skills are deficient in terms of quantity or quality. Even when there is a supply of qualified candidates, enticing them to enter the civil service and to remain incorruptible is a challenge (Beeson 2004:31).

In response to this problem, even before reaching national affluence, Singapore offered competitive salaries to their civil servants to attract talent and insulate staff from the temptations of corruption (Bellows, 2009:34-37; Quah, 2007:28). Countries with unattractive compensation schemes for civil servants are less likely to attract competent staff and foster scrupulous conduct. Resolving this problem is not easy; as

compensation schemes in the civil service are usually standardised, and granting exemptions solely for a single institution may generate resentment elsewhere in the civil service. The alternative, to increase civil servants' compensation across the board, can be too costly for low-income countries (Quah, 2011:14-17), and its advantages toward institution building may not be readily apparent to ruling political elites. The prestige attached by society to civil service can also attract competent and scrupulous candidates. The destitute post-war governments of Japan and South Korea were still able to attract enough exemplars because the culturally ascribed prestige of bureaucratic posts extend back to centuries-old mandarin administrative traditions (Fukuyama, 2004:30). Unfortunately, this channel for attracting talent is not available to countries without a deep bureaucratic tradition (Fukuyama, 2004:30).

The prestige and scruples of a bureaucracy are not enough to emanate authority. Bureaucratic authority over industrial policy also depends on credible policy instruments, which necessitates some form of control over finance (Beeson, 2004:31; Woo-Cumings, 1991:11). For example, post-war Japan established the Japan Development Bank (JDB) in 1951, with MITI appropriating the power to reject all loans inconsistent with its merit-based lending criteria (Johnson, 1982:208-209). This dictate signalled that respecting MITI's authority brought concrete incentives, and doing otherwise incurred costly punishments such as the deprivation of cheap long-term financing. In contrast, until 1973, Malaysia only depended on moral suasion to convince banks to lend to industries – which the banks consistently ignored. The government subsequently appropriated some control over industrial financing by requiring banks to allocate 25% of the increase in loans to the manufacturing sector (Chin, 2001:233). More recently, Wade argues that industrial policy must be carried out by bifurcated bureaucratic structures where the administrative channels of political patronage are kept separate from departments with control over finance (Wade, 2010:159). Nevertheless, this is still congruent with the view that somewhere within the bureaucratic machinery of industrial policy, a unit must possess leverage over financial resources. Otherwise, private entities will hardly take them seriously.

An overly authoritative and inflexible bureaucracy can similarly hamper industrial policy. Despite its many successes, Japan's MITI sometimes failed to temper decision-making authority with embeddedness, thereby

ignoring the useful information from its social linkages. In the 1980s, MITI launched grand plans to develop next generation supercomputers and artificial intelligence technologies. But Japanese firms reasoned that supercomputers and futuristic AI technologies did not answer any market demand and distracted from the more promising computer technologies tailored for the 'pedestrian' consumer. Despite this opposition, MITI prevailed over firms who knew the market better. MITI was proven wrong when the personal computer market boomed in the 1990s, which caught Japan unprepared to immediately compete with the US's IBM and then Microsoft. Ultimately, the supercomputer project failed (Callon, 1995:188-189).

### **The Threat of External Interference**

Embeddedness requires the bureaucracy to welcome informational inputs from social linkages, which normally consist of private firms, social organisations and some political actors. However, being embedded in these social linkages also exposes authorities to influence from business and political elites whose agenda may include rent-seeking, political accommodation, corruption and the capture of industrial policy itself.

In some cases, industrial policy encounters pressure from statesmen (present and past) who serve as back channels for business interests. In post-war Japan, when traditional conglomerates called *zaibatsu* failed to penetrate decision-making in MITI, they co-opted ministers to influence MITI on their behalf. Although MITI largely repelled intrusions from ministers, doing so caused projects delays, and consumed valuable organisational resources (Johnson, 1982:232-261). In other cases, politicians interfere with industrial policy to pursue more overt political interests. For example, the French government has claimed that its industrial policy only aids deserving high-potential sectors. However, in 2009, Segolene Royal, a prominent Parti Socialiste politician, fought to have funds disbursed to Heuliez, a troubled car parts maker and major employer in her home region (Speer, 2009; The Economist, 2010).

The private sector can employ devious tactics to force otherwise reluctant politicians to sway industrial policy in their favour – similar to what Samsung did in 1997. Initially barred by Korean industrial policy from entering the overcrowded automobile industry, Samsung eventually got President Kim Young Sam to intercede by choosing to locate the

automobile factory complex in Pusan District – the President’s political base (Chang, 1998:1557). Private firms may also test the bureaucracy for weak spots where collusion can take hold – with the aim of diverting state resources for the personal gain of accomplices from both sides. For example, in a recent corruption scandal in Spain, a businessman bribed his friends in the civil service to secure licences in wind power generation, a lucrative state-subsidised sector (The Economist, 2015). Even without resorting to such blatantly unethical behaviour, firms can attempt rent-seeking through more socially acceptable tactics such as ‘me too’ lobbying whereby other groups argue that it is only fair to grant them the same assistance afforded to current beneficiaries (Okimoto, 1989:6). Moreover, a policy instrument becomes a precedent once it is implemented; firms may capitalise on this precedent by continually framing the imminent success of a project or the survival of a vital industry as dependent on more state support (Chang, 2000:782; Okimoto, 1989:6).

Some of the above examples of interference are drawn from countries such as Japan and South Korea which succeeded in achieving rapid industrialisation. This coincidence only illustrates that the undesirable outcomes of vested interest interference such as sub-optimal decision-making, rent-seeking and corruption can be unavoidable yet relatively benign to the overall economy as long as elite interests do not overwhelm the bureaucracy. Only when these interferences successfully occur at a large enough scale does elite capture of industrial policy ensue (Wade, 2010:158). For example, after cowing the bureaucracy under military rule in the Philippines, President Marcos and his close associates systematically diverted industry ownership and state resources to themselves. Bello *et al.* (2009) argue that the elite capture of industries in the Philippines is strongly linked with decades of economic underperformance, characterised by the country’s deindustrialisation from the 1970s onwards (De Dios & Williamson, 2014).

### **Accountability and Institutional Design**

Once a firm receives state support, it still remains to be seen whether the firm pursues superior business performance or fails to do so due to the lack of accountability. The tools of industrial policy create moral hazard by shouldering some of the risks from firms. Consequently, firms lose

incentives to improve productivity, exercise fiscal prudence, and take appropriate levels of risk. Before the 1990s, India had foregone conditions for continued state subsidies; hence, its automobile industry – a favoured industry – was comically stuck producing car models from the 1950s (Wade, 2010:126). Even post-World War II Australia coddled its industries and labour unions with trade protectionism and generous subsidies, largely without enforcing performance or efficiency targets (Bell, 2002).

To prevent these perverse outcomes, accountability measures are necessary. A competent bureaucratic institution must be accountable to and be monitored by a high-level political authority that has a stake in the success of industrial policy (Rodrik, 2007:115). Transparency measures – such as the publication of transactions, and periodic accounting for expenditures – are helpful. (Rodrik, 2007:44). To make private entities just as accountable, a carrot-and-stick design is preferable; the carrot refers to state support, while the stick refers to *ex ante* performance criteria for continued state support, clear definitions of success or failure, and a sunset clause for withdrawing state support after a pre-determined period of time (Rodrik, 2007:115). This allows the state to cut losses quickly, and compels private beneficiaries to succeed or face consequences. Korea's success in car manufacturing exemplifies this process. In 1974, Korea's industrial policy ministry provided nascent Korean car manufacturers with long-term financing, trade protection and, later on, export subsidies. The ministry set clear targets in terms of projected domestic and global market share. The ministry also announced that the programme had a lifespan of only 10 years, thus instilling some urgency among the firms. Export subsidies were also strictly conditional on export performance (Wade, 2004:310).

Disciplining public-private coalitions toward favourable economic outcomes depends on good institutional design. The key design principle is not to fixate on grand policy outcomes – “which are inherently unknowable *ex ante*” (Rodrik, 2007:100) – but on the policy *process* of maintaining a strategic public-private coalition which uncovers informational leads on economic constraints and opportunities. Instead of focusing on this process during Japan's period of industrial catch-up, MITI selected which firms and industries received state support – a practice called 'picking winners'. Industrial policy is relatively easier to implement during periods of industrial catch-up, given that countries can tweak and emulate the industrial trajectories of more developed



countries. However, once a country successfully transitions into an industrialised economy, it becomes more difficult to find reliable references for emulation and industrial upgrading. Consequently, after Japan became an industrial heavyweight in the 1980s, MITI's attempts at picking winners resulted in several high-profile duds (Callon, 1995). Rather than solely pick winners which lead to riskier pioneering projects, industrial policy generally does better when bureaucrats help the private sector 'follow' visible economic opportunities. For example, in the 1980s, Taiwanese bureaucrats helped local firms pursue industrial upgrading by awarding tax holidays to firms who successfully manufactured advanced products (Wade, 2010:155-156).

The bureaucracy should also favour new activities, given that the main purpose is to diversify the economy. For example, the JDB under MITI only provided funds for investments in new projects, and rejected applications intended to cover operating costs (Johnson, 1982:208). State support must prioritise specific activities that target specific private sector failures or have demonstrable positive spillovers (Rodrik, 2007:115). For example, after analysing informational clues from social linkages, MITI identified the coordination externality arising from the lack of convenient logistics between related industries, and the distance between industrial centres and ports. In the early 1950s, MITI dredged harbours, built deep-sea ports, placed intermediate processors next to final manufacturers, and gave financial incentives for manufacturers to move to these dockside industrial belts (Johnson, 1982:218). Aside from solving the coordination externality and helping the transition to heavy industries, MITI's project also had spillover effects on logistics, transportation, and shipping sectors.

### **Constraints Posed by the Nature of Civil Society**

A troubling challenge is that the aforementioned principles of good design and accountability can be defeated without the right socio-cultural setting. The informal institutions of civil society – its prevailing values, social relations, cultural predispositions and history – influence whether the calculus of formal institutional incentives and disincentives holds or not (Fukuyama, 2004:30; Okimoto, 1989:238). When compatible informal institutions are absent, formal institutions of industrial policy are constrained. For example, despite standard rules against corruption

and formal institutions for prosecution, civil servants in many African states engage in systemic corruption (de Sardan, 1999; Craig and Porter, 2006). They can do so with impunity because patrimonial corruption has become intrinsically part of social relations in many post-colonial African states (de Sardan, 1999:26; Medard, 2002:379-380). By contrast, orthodox economic thinking would reason that Japan's policy of lifetime employment for civil servants would institutionalise shirking (Fukuyama, 2004:62; Okubo, 2005, 4). But instead, Japanese civil servants worked notoriously hard – an alleged cultural trait (Fukuyama, 2004: 62).

Historically-induced social expectations also influence industrial policy. For example, more than a century of protectionism has left profound imprints in Australian culture and society. Australian protectionism did not originate from policies of industry development, but as a means of Australian colonies to collect revenue since the second half of the nineteenth century (Ewer, 1988: 194). After the Federation of Australia, high tariffs generated employment and substituted for the lack of federal income taxes (Castles, 1988; Conley and van Acker, 2001: 506). Labour unions further entrenched protectionist tariffs and state subsidies in Australian political culture as a way of preserving their industrial privileges (Conley and van Acker, 201: 513). Moreover, the prosperity of Australia and the persistent belief within Australian society that the country's rich natural resources will tide things over have concealed the need for industrial reforms (Conley and van Acker, 2001: 513). Hence, until the 1980s, social expectations of industrial policy only involved the carrot of protectionist tariffs (Conley and van Acker, 2007: 507), and largely ignored the stick of scheduled efficiency targets. Its critics say that a century of protectionism created an industrial culture that was slow to adapt to a new environment characterised by international competition and unsustainable levels of state support.

The effects of historical antecedents on geopolitics are also said to influence industrial policy. For example, many countries with successful industrial policies – such as Taiwan, Singapore, and South Korea – shared a historical pre-condition: they faced serious security threats even after World War II (Vartiainen, 1999:223). Taiwan has always lived under the shadow of armed conflict with Beijing, as demonstrated by the successive episodes of brinkmanship and skirmishes along the Taiwan Strait beginning in the 1950s. In the same decade, South Korea almost lost its sovereignty when North Korea, aided by Beijing and the Soviet Union, succeeded in invading well beyond Seoul before being repelled

by a US-led coalition. When Singapore was kicked out of the Federation of Malaysia, Singapore's political elite feared insurrection instigated by communist-backed underground militants and outright invasion by Indonesia (Lee, 2000). These historical threats to the very existence of nation intensified nationalistic devotion, and compelled elites to align their interests under national development, thereby securing sufficient social and class support for industrial policy. This congruence between elite interest and national development is key to tempering the selfish interests of elites and driving social transformation toward economic progress (North, 1990).

These considerations suggest that a country's socio-cultural and historical pre-conditions may assist or constrain domestic institutions from administering effective industrial policy. Bringing about 'compatible' informal institutions can involve introducing new institutions which aim to make up for missing informal institutions. While possible, this process only highlights the additional burden imposed by unfavourable socio-cultural and historical pre-conditions.

### **Incompatible Political Economic Structures**

There are also institutional hurdles which cannot be accurately classified as private sector interference or flaws in institutional design. Broader political economic structures also create conditions which hinder bureaucratic authority from pursuing industrial policy. One example is financialisation, which refers to the rapid growth of liberalised finance sectors as a share of GDP, and the increasing participation of non-financial firms in financial transactions (Tomaskovic-Devey & Lin, 2011: 539). Financialisation tends to shift investments from the real economy toward speculative activities. Consequently, industries are deprived of adequate or appropriate financial resources (Gabel, 1995; Tomaskovic-Devey & Lin, 2011) and bureaucratic institutions find it harder to direct financial resources toward industrial policy.

Another issue is how political forces constrain the political will to pursue well-designed industrial policies. As seen in Australia, one such constraint is the lack of consensus among bureaucrats and politicians regarding policy instruments. Although the belief in protectionism weakened in the 1980s, there were different proposals regarding Australia's transition into a competitive open economy. Treasurer Paul

Keating argued that interventionist policies were unnecessary; economic levers such as wage restraint, currency depreciation, and increase in domestic demand were supposedly enough (Conley and Van Acker, 2011: 507-508). In contrast, Senator John Button advocated carrot-and-stick industry plans which helped selected industries improve competitiveness while gradually reducing protectionist tariffs. The Button Plans succeeded in improving competitiveness and were terminated in 1992 according to schedule (Owens, 1995). Due to the recurring lack of consensus, Australian governments have since reverted to *ad hoc* interventions rather than long-term, carrot-and-stick industry policies (Conley and Van Acker, 2011: 506-508).

It is also reasonable to say that state institutions necessary for successful carrot-and-stick industry policy can operate more freely in polities where the electorate's influence is limited. Hence, a country's regime type may present institutional hurdles. For example, Australian labour unions and other powerful lobby groups welcome the 'carrot' of state support (Leigh, 2002), but tend to oppose the 'stick' of efficiency targets. In rambunctious democracies such as the Philippines, voters may perceive industrial policy as an elitist policy catering to the country's conglomerates and crony capitalists. When faced with voter disapproval, parties in both countries may find it politically costly to undertake well-designed industrial policies which include both carrot and stick. In contrast, non-democratic states with mono-party regimes, such as China and Vietnam, are more resilient to popular opinion, and can therefore undertake long-term industrial policies should their political elites decide to do so.

A country's stance on other policy matters might also make it politically untenable to undertake industrial policy. For example, the United States cannot openly practice industrial policy because it compels other countries to adopt neoliberal policies and abandon protectionism. The aforementioned political economic constraints are not insurmountable given that most successful capitalist economies found ways to implement industrial policy through various guises (Chang, 2002; Mazzucato, 2014). For example, the US obfuscates its industrial policy behind a facade of military spending in technologies with industrial applications (Mazzucato, 2014). Given the negative connotation attached by neoliberal orthodoxy to industrial policy, some countries reframe it as 'innovation policy' (Edquist, 2001). Despite having fundamental similarities with industrial policy (Soete, 2007), innovation policy is

more politically acceptable because it connotes support for small entrepreneurs in the digital economy, rather than the state's ongoing support of traditional conglomerates (Edquist, 2001). Clearly, some countries needed to disguise or layer their industrial policies to make them operational and successful. The implication is that industrial policies in other countries may fail because they openly confront institutional hurdles arising from incompatible political economic structures. Adopting strategies for circumventing these incompatible structures is an important concern.

## **Conclusion**

Drawing on a range of examples, this article demonstrates that tough institutional conditions must be hurdled for industrial policy to be effective. These refer to the difficulties involved in balancing bureaucratic authority and embeddedness within a framework of accountability – without either overlooking useful informational leads from elites or letting elites capture industrial policy. Five major institutional issues impede the achievement of such balance. First, the desirable kind of bureaucratic authority is difficult to establish without state capacity, a certain level of personnel skills, the ability to attract talented bureaucrats and keep them incorruptible, effective policy instruments through the appropriation of control over finance, and the skill to deftly exert authority without being overly inflexible. Second, the external interferences that besiege the bureaucracy must be withstood to prevent elite capture of industrial policy. Third, the lack of accountability mechanisms and good institutional design are serious impediments. This can be remedied by subjecting the bureaucracy to oversight and transparency procedures. Business interests must be tied to a carrot-and-stick approach. Fourth, although certain aspects of industrial policy can be contrived via decree, good institutional design and accountability measures, some are contingent on the nature of civil society and history – which may take longer to change via institutional reform. Finally, attention needs to be given to the problems arising from broader political economic conditions such as financialisation or lack of intra-government consensus that may constraint the purposive exercise of bureaucratic authority.

When these institutional challenges are mitigated, industrial policy might just fulfil its vision of generating industrial diversification and improved economic outcomes.

*Godofredo Ramizo Jr. recently finished a Masters in Governance and Public Policy at the University of Queensland*  
*godofredo.ramizo@uq.net.au*

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## References

- Beeson, M. (2004), "The Rise and Fall of the Developmental State: The Vicissitudes and Implications of East Asian Interventionism", in L. Low, (ed.), *Developmental States: Relevant, Redundant or Reconfigured?*. New York: Nova Science: 29-40.
- Bell, S. (2002), "Economic Governance and Institutional Dynamics", in S. Bell, (ed.), *Economic Governance and Institutional Dynamics*. Victoria: Oxford University Press.
- Bello, W., M. De Guzman, M. Malig, and H. Docena (2009), *The Anti-development State*. Manila: Anvil.
- Bellows, T. (2009), "Meritocracy and the Singapore Political System", *Asian Journal of Political Science*, Vol.17(1): 24-44.
- Callon, S. (1995), *Divided Sun*. Stanford, Calif.: Stanford University Press.
- Castles, F. (1988), *Australian Public Policy and Economic Vulnerability*. Sydney: Allen & Unwin.
- Chang, H. (1998), "Korea: The misunderstood crisis", *World Development*, Vol.26 (8), 1555-1561
- Chang, H. (2000), "The Hazard of Moral Hazard: Untangling the Asian Crisis", *World Development*, Vol.28 (4), 775-788.
- Chang, H. (2002), *Kicking Away the Ladder*. London: Anthem.
- Chin, K. (2001), "Financing Manufacturing in Malaysia: Experience, Issues, and Challenges", in K. Jomo, (ed.), *Southeast Asia's Industrialization Industrial Policy, Capabilities and Sustainability*. Basingstoke: Palgrave.
- Conley, T. and van Acker, E. (2011), "Whatever Happened to Industry Policy in Australia?", *Australian Journal of Political Science*, Vol.46 (3): 503-517.
- Craig, D. and D. Porter (2006), *Development beyond neoliberalism?*. London: New York.

- Cudworth, E. (2007), "The "New" Right: The Minimal State", in C. Erika, T. Hall and J. McGovern, (eds), *The Modern State: Theories And Ideologies*. Edinburgh: Edinburgh University Press.
- De Dios, E. and J. Williamson (2014), "Deviant Behaviour: A Century of Philippine Industrialization", in A. Balisacan, U. Chakravorty, M. Ravago, (eds), *Sustainable Economic Development: Resources, Environment, and Institutions*. Oxford: Elsevier.
- de Sardan, O. (2000), "A Moral Economy of Corruption in Africa?", *The Journal of Modern African Studies*, Vol.37 (1): 25-52.
- Edquist, C. (2001), *Systems of Innovation for Development*. Background paper prepared for UNIDO World Industrial Report 2002, UNIDO: Vienna.
- Evans, P. (1995), *Embedded Autonomy*. Princeton, N.J.: Princeton University Press.
- Ewer, P. (1988), Industry policy in Australia: Debate and Practice. *International Review of Applied Economics*, Vol.2 (2): 189-212.
- Fukuyama, F. (2004), *State-building*. Ithaca: Cornell University Press.
- Grossman, G. (1990), "Promoting new industrial activities: A survey of recent arguments and evidence", *OECD Economic Studies*, 14: 87-125.
- Hausmann, R. and D. Rodrik (2003), "Economic Development as Self-Discovery", *Journal of Development Economics*, Vol.72 (2): 603-633.
- Hughes, O. and D. O'Neill (2008), *Business, Government and Globalization*. Basingstoke: Palgrave Macmillan.
- Imbs, J. and R. Wacziarg (2003), "Stages of Diversification", *American Economic Review*, Vol.93 (1): 63-86.
- Johnson, C. (1982), *MITI and the Japanese Miracle*. Stanford, Calif.: Stanford University Press.
- Lee, K. (2000), *From Third World to first*. New York: HarperCollins Publishers.
- Leftwich, A. (2000), *States of Development*. Cambridge: Polity.
- Leftwich, A. (2005), "Politics in command: Development Studies and the Rediscovery of Social Science", *New Political Economy*, Vol.10 (4): 573-607.
- Leigh, A. (2002), Trade Liberalisation and the Australian Labour Party. *Australian Journal of Politics and History*, Vol.48 (4): 487-508.
- Mazzucato, M. (2014), *The Entrepreneurial State*. London: Anthem Press.
- Medard, J. (2002), "Corruption in the Neo-patrimonial States of Sub-Saharan Africa", in A. Heidenheimer and M. Johnston, (ed.), *Political Corruption: Concepts and Contexts*. New Brunswick, NJ: Transaction Publishers, 379-402.
- North, D. (1990), *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.
- Owens, D. (1995), The Button Plan in Retrospect. *Economic Papers: A Journal of Applied Economics and Policy*, Vol.14 (3): 69-79.
- Okimoto, D. (1989), *Between MITI and the Market*. Stanford, Calif.: Stanford University Press.

- Pack, H. and K. Saggi (2006), "The case for industrial policy: a critical survey", World Bank Policy Research Working Paper 3839.  
<https://openknowledge.worldbank.org/bitstream/handle/10986/8782/wps3839.pdf>
- Patrick, H. (1986), "Japanese High Technology Industrial Policy", in H. Patrick, (ed.), *Japan's High Technology Industries*. Washington: University of Washington Press.
- Quah, J. (2007), *Combating Corruption Singapore-style*. Baltimore, Maryland.: University of Maryland School of Law.
- Quah, J. (2011), *Curbing Corruption in Asian countries*. Bingley: Emerald Group Pub.
- Rodrik, D. (2004), "Industrial Policy for the Twenty-first Century", A paper commissioned by the United Nations Industrial Development Organization. <http://www.hks.harvard.edu/fs/drodrik/Research%20papers/UNIDOSep.pdf> [Accessed 15 June 2015]
- Rodrik, D. (2007), *One Economics, Many Recipes*. Princeton: Princeton University Press.
- Shaw, B. and Hughes, O. (2002), "Economic Governance and a Coordination Rationale for the State: The Case of Industrial Policy", in S. Bell, (ed.), *Economic Governance and Institutional Dynamics*. Melbourne: Oxford University Press: 200-225.
- Soete, L. (2007), From Industrial to Innovation Policy. *Journal of Industry, Competition and Trade*, Vol.7 (3): 273-284.
- Speer, L. (2009), Race to save Heuliez. *Automotive News Europe*.  
<http://www.autonews.com/article/20090407/ANE02/904079997/race-to-save-heuliez>  
 [Accessed 17 August 2015].
- Stein, H. (2012), "The Neoliberal Policy Paradigm and the Great Recession". *Panoeconomicus*, Vol.59 (4): 421-440.
- The Economist (2010), "The Global Revival of Industrial Policy: Picking Winners, Saving Losers", *The Economist*. Available from: <http://www.economist.com/node/16741043> [Accessed 10 June 2015].
- The Economist (2015), "Corruption in Spain: Inside Jobs", *The Economist*.  
<http://www.economist.com/news/europe/21650176-research-suggests-government-cronyism-may-cripple-spains-economy-inside-jobs> [Accessed 10 June 2015].
- Tomaskovic-Devey, D. and Lin, K. (2011), Income Dynamics, Economic Rents, and the Financialization of the U.S. Economy. *American Sociological Review*, Vol.76 (4): 538-559.
- Vartiainen, J. (1999), "The Economics of Successful State Intervention in Industrial Transformation", in M. Woo-Cumings, (ed.), *The Developmental State*. New York: Cornell University Press.
- Wade, R. (2004), *Governing the Market*. Princeton, N.J.: Princeton University Press.
- Wade, R. (2010), "After the Crisis: Industrial Policy and the Developmental State in Low-Income Countries", *Global Policy*, Vol.1 (2): 150-161.
- Woo-Cumings, M. (1999), "Chalmers Johnson and the Politics of Nationalism and Development", in M. Woo-Cumings, (ed.), *The Developmental State*. New York: Cornell University.