Small firms' Dynamism & the Organizational Forms: Nature of 'Young-Kaldor Industrialization'

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Industrial clusters and districts have been recognized as key drivers of advanced growth. The existing literature perhaps focuses more on Marshallian industrial organization in which how small firms define the dynamic organization form is important. The present paper argues that a Keynesian growth perspective should dominate in which new investments and growth manifested in narrow specializations promote the dynamism of small firms that underpins large-small firm nexus. The policy focus is on enriching the manufacturing as an engine of growth. Growth promotes the dynamism of small-large firm nexus which in turn reinforces growth. The focus is on the proper industrialization that advances the endogenous evolution of the dynamism of small firm that sustains learning by doing to innovate.

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Introduction

The present focus is on understanding the developed status of countries that typifies the existence of a larger set of dynamic small firms that contribute to innovations and advanced growth in countries. As a policy focus, the present paper takes up an argument in which the advanced growth is mainly driven by a dynamic learning by doing process that should underpin the role of small firms. In this focus, even if the small firms have the ability to take forward learning by doing-led innovations, they face serious constraints and the focus should zero in on the organization form of the firms that supports the dynamism. The organizational form would highlight the symbiotic inter-linkages between small and large firms in which the growth oriented larger firms provide the scope for the dynamism of small firms that reinforces large firms' greater competitiveness and resource augmentations that sustain advanced growth. The focus then is on the organizational form that stresses this nexus of the firms.

The present paper would endeavor to illustrate that a favorable macro growth environment that sheds light on a proper industrialization is important in highlighting the dynamic organization forms of small firms. A discussion on alternative growth perspectives therefore assumes significance. There is the urban-bias literature that elaborates on how a prior developed agriculture induces the proper industrialization and growth. The present paper however zeros in on an alternative Keynesian (Young, 1928; Kaldor, 1972; also see, Padhi, 2019) cumulative causation perspective that would emphasize on an autonomous role of industrialization that induces the endogenous growth of innovations in terms of constant coming up of specializations and knowledge.

At the outset, it is true; in a developing country context of initial higher share of agriculture, a lack of proper, developed agriculture would highlight the larger existence of small rural firms in non-prosperous small cities/towns/villages who face skill/finance constraints. In trying to explain the situation, the existing literature on urban bias thesis provides an argument (perhaps, a pre-Keynesian one) that industrialization programs if autonomous and does not follow prior developed status of agriculture results in urban bias. This would highlight a resource diversion towards industrialization that amounts to a misallocation of resources and inhibits the proper development of agriculture. In this argument, the proper developed agriculture not only can provide demand support for non-farm activities in the vicinity, but also, importantly, through various inter-linkages, could have had led to development of proper industrialization and developed status of small firms in urban areas. One implication is that the underdeveloped status of small firms, mostly referring to firms engaged in non-farm activities in rural areas, is linked to some form of urban bias. And, commenting on the persistent state of the continuing debate on urban bias, Corbridge and Jones (2009: 30) have this to say: "Where does this leave us? When Winston Churchill worried about the force of his speeches in Parliament, he reminded himself to "shout here [because] the argument is weak'. We detect more than a fair bit of shouting in the debates around urban (rural) bias. Overman and Venables (2005:5) very properly note that positive (clustering/spillover effects) and negative (rent seeking/urban bias) hypotheses about city growth in the developing world "are not mutually exclusive; both operate to varying degrees in different countries and cities". We say Amen to that. Academics are notorious in some quarters for sitting on the fence, but there is no case for opting for the urban bias thesis or its 'opposite' in the round and in all respects. Forms of politics or public policy that steamroller over local realities in the name of theoretical purity do not help poorer people."

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To this, the present paper's comment would be a big 'hallo', in response. The above observation gives primacy to the importance of 'local politics' and how they shape agriculture. That is, this thesis (Varshney, 1993) would hold that industrialization (and urbanization) requires a resource reallocation from pre-existing (as a historical fact) agriculture; it is up to the local politics to decide whether it amounts to transferring a surplus (without reducing agricultural production) or a squeeze (that hurts agriculture). In the former case, it helps proper industrialization and in the latter case, as in the case of the developing countries, it hurts both. This in fact amounts to a thesis that industrialization can go either way, all depending on local politics' decisions with respect to agriculture.

The present paper's (quite strong) reservation is that the argument gives rather an active role to 'local politics' that would shape up agriculture, which in turn defines the possibility of rural development via modernization of agriculture. It gives a passive role to 'industrialization'.

In an alternative reasoning, the present paper's initial hypothesis would be: it is proper industrialization supporting an advanced form of inter-linkages can directly benefit small firms; indirectly it also supports rural development via its impact in terms of brining in the modernization of agriculture (and its spillover effects).

A discussion on the nature of industrialization is pertinent. Sometimes, industrialization can be seen to be based entirely on prior savings-based reallocation (or redirection) of existing resources; but then, it can hardly be growth promoting, and can involve the dysfunctional rent seeking behavior, aggravating urban rural divide.

However, industrialization can also underline a cumulative causation that supports its autonomous, endogenous development. The focus zeros in on expansions that embody some newness, some inventions - Young (1928) and Krugman (1991) would provide different perspectives, but the common emphasis is on constant coming up of newness in terms of specializations that embody specialized intermediate goods and labor force. The present paper would rely more on the Kaldorian elaboration of Young (Kaldor, 1972) in which the specializations translate into finance-led independent new investment opportunities (i.e. new resource creations) that add to the market size in the Keynesian fashion, supporting further growth of specializations as Keynesian supply responses and so on.

The present paper would argue that this Keynesian Youngian perspective provides insight into the process of growth of specializations in which different firms specialize in different categories and the resultant dynamic nexus between large and small firms supports the coming up of further new specializations.

In this reasoning, the endogenous growth of specializations and knowledge-based capital and intermediate goods industries can induce a developed surplus

producing agriculture that would also, based on its own developed inter-linkages, support rural development; but the paper goes beyond it to underscore the possibility that the industrialization would highlight dynamic organization forms that in turn can support dynamic small-large firms nexus.

Given this initial understanding, the present paper develops an argument in which the proper growth would support the dynamism of smaller firms and such industrialization, with possible urban-rural dynamic linkages, adds to growth. No doubt, an only larger firm centric growth could raise issues, but as would be argued in this paper, a dynamic nexus of small and large firms in fact reinforces innovation-led proper growth momentum.

Though the present paper aims as an Indian study, there may not be any direct existing empirical support for this thesis; but then, the issue is one of what should be the nature of industrialization, rather than a study of existing industrialization outcomes. To take up this issue, the paper is organized as follows. First, we would discuss the basic hypothesis of the present paper concerning the possible dynamism of smaller firms and their role in advanced growth processes and compares it with the existing literature's focus on the dynamism. We would then take up the broader debate on growth and illustrates how whether growth results in a dysfunctional urban bias or brings in dynamic large and small firm nexus depends on the nature of industrialization. This was followed by the issue of how a proper growth process supports dynamics of small and large firms' nexus and how the nexus in turn reinforces growth. we are then concerned with the implications of possible urban-rural mobility that dynamic organizational form of firms involve. Finally we conclude on the broader policy issues.

Importance of Growth & Dynamism of Small Firms

At the outset, some basic hypotheses developed in the present paper need mention. The present paper endeavors to extend the story of cumulative causation that particularly highlights the importance of external economies. The emphasis is on the Keynesian Young-Kaldor cumulative causation (Padhi, 2019). External economies translate isolated new micro supply response involving specializations into a macro supply response and the resultant new finance-led macro investment adds to the market size (and learning by doing) to add to growth of further macro investment-led new specializations and so on.

Krugman (1991) adds a supply side perspective in which existence of some developed status with respect to availability of specialized inputs and labor supply adds to new specializations that in turn adds force to the "availabilities", and so on. If this perspective underlines the incentives that guide reallocation of existing resources (firms) to add to specializations, the above Keynesian version relies on how the incentives structure mobilization of new resources (firms) that can reinforce macro investment climate and growth (Padhi, 2019).

The aim of the present paper is to add another dimension to the above cumulative causation. The very existence of a set of specializations can highlight the role of different specialized firms, each concentrating in a different specialization and this organizational form of firms underlining small and large firm nexus reinforces the learning by doing-led coming of further specializations.

If so, lack of growth and favorable macro market expectation (and low profit expectations) could negate the dynamism and, therefore, highlight financial/skill constraints that face smaller firms; such low market expectations can also come with adverse supply/demand conditions, possibly making clear as to why small firms rely on traditional organizations forms and operate within some set family/social ties-based traditional parameters, but those come with their limitations.

Here, mention must be made of the alternative literature concerning the dynamism of small firms that would follow the Marshallian methodology (Belussi & Cladari, 2009): the organizational form of the firms has to be some form of clusters/industrial districts that provides the basic competitive environment; the firms operating within clusters are central to the generation of innovations, larger dynamic firms and advance growth.

However, a basic criticism is that this literature assumes the existence of such dynamic small firms in some advanced countries and does not explore or explain why the dynamism is only limited to the already developed countries that experience advanced growth and industrialization. In fact, it can be argued that the "existing" favorable macro environment in some developed countries permits the firms to rely on some Marshallian notion of externalities such as "widespread knowledge and information that are in the air", or access/depend on such education/educated milieu (taken up below the concluding section on policy issues), and remain dynamic.

Moreover, success stories underline how the dynamic clusters depend crucially on the external economies created by the pre-existing set of sophisticated subsidiary trade/firms that provide the specialized equipment, inputs, etc. (Belussi & Caldari, 2009); if so, the dynamism of small firms emphasizes on the prior existence of some developed status that explains the availabilities of the specialized inputs; of course, if the developed status also comes with the support of external economies in terms of larger market access and its growth, it can make clear economical uses of the sophisticated, specialized "inputs".

Therefore, the present paper's purpose is to somewhat reverse the causation: it is the advanced growth processes, proper industrialization that supports dynamic organizational forms, the existence of dynamic firms. However, once this is allowed for, Marshallian insight into the role of dynamism of small firms, proper organizational forms defining a dynamic, competitive structure assumes importance: the dynamism of the small firms adds to innovations to add to growth.

Debates on Growth

To start, if a focus is on the possible explanation of an advanced growth process, the arguments underlying the urban bias thesis and its bias for a particular growth process fail to convince. The thesis posits a macro growth process in which proper development of agriculture would support some proper industrialization. The problem is conception of industrialization used is too abstract: what exactly it signifies as a process? To elaborate, no doubt, a developed status of agriculture is important for a developed status of the economy. The present paper however questions the causation underlying the argument. The thesis does not explain the importance of industrialization-led growth processes as such. For the sake of argument, for instance, a country relying on agriculture per se, and, say, without witnessing an urban bias, cannot continuously provide the growth of good employment opportunities. It is true that, as locational theories (say, Weber) note, agricultural development can support some form of local industries (perhaps, cottage industries). Expansions in both agriculture and in these cottage industries however could be subject to decreasing returns, and could define some static employment opportunities.

The thesis posits a macro growth process in which proper development of agriculture would support some proper industrialization.

Studies on advanced form of industrialization generate interest because it creates sophisticated external economies that not only lends it autonomous status, but also permits expansions under conditions of increasing returns. As Krugman (1991) noted, industrialization as a sequential process would create external economies that permit it to be increasingly divorced from distribution of natural resources (and initial ties with agriculture). The resultant autonomous development would focus more on roles of dynamic learning by doing and knowledge gathering processes internal to industrialization and that makes clear endogenous growth of formal science, specialized firms looking after formal science and technological progress.

Here, the Liptonian thesis does not exactly maintain that the absence of urban bias as such can ensure growth of good employment opportunities in agriculture, say the modernization of agriculture. The latter has to be supported by the intervention of technological improvements. Now, where do these improvements come about, say without a prior urban-based industrialization – and a dynamic learning by doing-led human capital-led capital goods sector? If they have to be imported, again they have to depend on the industrialization elsewhere; then why not depend on prior domestic industrialization? Where would the demand side support for higher development in agriculture come from, say, without a prior urban base?

Second, in a related argument, the urban-bias argument gives primacy to agricultural development and its positive impact, through inter-linkages, on the rural non-farm sector/firms (Lanjouw and

Lanjouw, 2001; but see, Chandrasekhar, 1993; Chakrabarti & Kundu, 2009, for reservations). However, it remains silent on the issue of how successful industrialization will be as in the present day developed countries it not only supported the successful 'migration' (i.e. assuming that all countries start with a rural base), but also transformed agriculture (with subsidy support), without being manifested in urban-bias.

Third, and perhaps most important, such a thesis relies too much on the price twist-led urban-bias argument (Lipton, 1968; 2005; Bates, 1988; for critical survey, see Corbridge & Jones, 2009), showing that proper price mechanism gets twisted by urban interests, against the rural-agriculture interest. In a way, therefore, it basically relies on Schultz (1964) (and World Bank, 1981; 1982; 1986; 1988; 2004; 2005) argument to the effect that the correct 'prices' would correct the otherwise dysfunctional urban-bias, providing the proper price signals for agricultural development, providing in turn much needed food security and rural development.

The issue here is: does advanced and "autonomous propensities of industrialization" per se induce a price twist, or it all depends on the nature of industrialization? If so, what exactly is proper and what is improper industrialization? Similarly, what exactly is meant by "urban interest"? Is an industrialization process that defines some urban interest necessarily going against agricultural development?

Issue of Industrialization: Urban Bias or Dynamic Large-Small Firms Nexus?

The present paper maintains that the transition to a developed growth and industrialization, at an initial stage, would involve some resource/surplus transfer from rural agriculture (for the initial historical fact-based argument in this context, see Byres, 1974; 1979). The lack of domestic availability of the surplus would perhaps indicate reliance of industrialization on exports that targets agricultural surplus elsewhere. What however is important is that these sources of resource mobilization translate into higher domestic savings per domestic investment that in turn supports further finance-based enhanced acceleration principle with magnified overall growth of income (and government revenue) (Padhi, 2015b).

The transition to the developed status demands adaptation to constant changes in demand and supply conditions.

At the same time, for a proper developed status of industrialization, the proper inter-linkages amongst the three stakeholders - the larger firms, the financial institutions, and the government (in a broader sense to include also the judiciary) – urban centers play an important role. To elaborate, the transition to the developed status demands adaptation to constant changes in demand and supply conditions, search for innovation; it would signify constant departure from the pre-

existing traditional/static state of affairs (say, as discussed earlier by Schumpeter, 1934) and reliance not on the pre-existing well established markets but on the creation of new markets/new resources, which requires the collection of new information, the need of processing it, make short run and long run contracts (and see to it that they are fulfilled), etc. Then, the present paper suggests that these transaction costs would be lower in 'urban' settings. The provision of more efficient infrastructure with respect to transport, communication, the advanced formal science to efficiently process information, taking advantage of higher economies of scale have to be urban centric. This urban setting also permits the growth-oriented firms to revise the investment plans – efficient processing of new set of information that otherwise would involve higher transaction costs.

In addition, the role of urban centers are also important in advanced industrialization that highlight narrow specializations in which specialized firms look after specialized tasks; urbanization-led enhanced transaction costs efficiency can permit the specializations (Yang & Sachs, 2008; Yang & Ng Y-K, 2015). The concentration of many such specialized firms in urban centers also provides facilities with respect to easy access to specialized spare parts/labor etc.; they constitute the source of pecuniary external economies that support the Marshallian growth of industries (also see, Krugman, 1991).

However, urban-centric-bases do not necessarily imply 'urban-bias'. The present paper holds that whether the urban-centric growth process transforms into dysfunctional urban bias outcome or supports more dynamic large and small firm nexus, with possible rural-urban mobility, depends on the nature of industrialization.

Case I: Large Scale-Centric Industrialization & Urban Bias Possibility

Urban centers can support industrialization that could refer only to the realization of higher scale economies, per se (Murphy et al, 1989). In this case, the urban centric phenomenon translates into urban bias. To elaborate, the realization of scale economies (see Murphy et al, 1989) takes place with given endowments, preferences, and technology – it visualizes a transition from rural cottage industries to higher scale based urban industrialization. This industrialization can highlight reallocation of existing resources that underpins urban bias. To elaborate, larger scale is based on higher fixed costs that has to be compensated by higher monopoly profits; though the realized profits (if spent) creates pecuniary external economies, supporting the realization of scale economies (and profits) in the other sector, this interdependence highlights strategic complementarities (Murphy et al, 1989) where profits of one also depends on the realization of profits by others. This industrialization has to take place simultaneously in many sectors, but market processes cannot guarantee this outcome; the outcome depends on history, expectations, etc. (Krugman, 1991; Solow, 1998; for

the literature, also see Mookherjee & Ray, 2001); much (therefore) depends on the government initiatives, say the creation of the initial market that induces scale economies (Krugman, 1992; Solow, 1998; 2003). The implication is that such higher scale-based industrialization tends to concentrate in given 'areas' that provide the 'market' advantage; or, government support in terms of enlargement of market, or the required 'subsidies.'

In addition, if higher monopoly profits also rely on 'higher' monopoly price advantages, this urban concentrate can also explain the Liptovian price twist, but (now) only because, the monopoly profits are to be derived from lower wages and wage goods prices. Furthermore, if the transition to higher scale economies is an 'once for all transition' (and the additions of sectors in the process providing the only transitory growth momentum), it otherwise has limits with respect to possible future growth momentum (Padhi, 2016 for elaboration); if this transition does not provide further new investment opportunities, the only possible outlet (for the spending of profits that otherwise is crucial for the market issue) is the higher conspicuous consumption, which provides the pull factor (through demonstration effect) for the migration from the rural areas, which though now takes place without further employment opportunities (i.e. explaining the emergence of urban poverty).

Perhaps most important for the present context, this industrialization can promote rent seeking behavior that can aggravate the urban-rural divide. On the one hand, the transition to this industrialization, without further growth possibilities, defines a definite limit to the size of the 'city', say as an administrative unit (for literature on the optimum size, see Corbridge & Jones, 2009). On the other hand, it also induces monopoly profits, which is a prize worth having that can explain rent-seeking behavior (Martin, 1989: 33-4; Maddala & Miller, 2006: 330-3). Both the existing firms and new entrants would spend a lot of resources to compete, to share the monopoly profits. The implication is that there would be more resource diversion (say from agriculture) than what is required (therefore the price twist) for the realization of scale economies, putting also pressure on the dysfunctional size of the city.

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Case II: Proper Industrialization

In an alternative focus, urban-centric industrialization can highlight larger firms that targets large volume output to initiate a finance-led (or exports-led) division of labor (emphasized by Young, 1928; Kaldor, 1972; also see, Padhi, 2014; 2015a; 2015b), which is viewed as an invention. Even if such a move, initially, would highlight 'within the firm' specializations, the Keynesian income effect created by the finance-led investment, and the technological external economies created by division of labor support the transition towards a generalized adoption

of division of labor (also see, Padhi, 2019); this process is aided by sophisticated learning by doing (Padhi, 2014a) that permits the emergence of specialized firms looking after the narrow specializations of sub-tasks of many larger firms i.e. the emergence of domestic industrial differentiation, typifying the coming up of many new sub-tasks, processes, new industries, etc.

The focus is again on larger firms but who take advantage of finance-led new resource creation in the form of the initiation of division of labor that adds to market size and the growth process in terms of the transition to the generalized division of labor, which insofar as refers to further finance-led higher market size induces still greater industrial differentiation, and the process can propagate itself in a cumulative way. At each stage, there is the finance-led new resource creation that adds to the growth of market size to add to further growth momentum.

It needs emphasis that this process would also initiate some resource reallocation, but these avenues of finance-led new resource creations resulting in the external economies-led growth of new investment opportunities would suggest a magnified increase in aggregate income that would grow in a cumulative way.

Nature of Supply Responses

The different supply side cumulative causation perspectives need a mention. Krugman (1991) – and the related literature-focuses on growth of varieties of goods that comes with intermediate goods and labor specializations. Youngian perspective stresses on the initiation of division of labor, and whether it gets reflected in within firm or between firm specializations, it involves specializations in various production sub-tasks, in production of specialized machinery, intermediate goods, marketing, trading, finance, etc. (Stigler, 1951); since the emphasis is on growth of specialization that involves growth of varieties of specialized capital and intermediate goods, it is but natural that this growth would involve investments that outpaces existing savings and the finance-led investments (in Keynesian sense) adds to growth of market size that matches the growth of specializations that target larger volume of output.

There is more to the Keynesian supply responses (Padhi, 2014a; 2019); the Youngian industrial differentiation underlines a sophisticated learning process that has the dynamic implication with respect to other induced specializations. First, there is some learning by doing to improve when firms (and the persons within them) creating (informal) specializations face technological and economic problems, and learn to improve them; this can explain the advent of formal science, in order to understand the principles underlying the specialization. Second, there is the learning from others (i.e. the generalized adoption of division of labor). Third, the generalized adoption of division of labor creates the market for specializing in different specialized sub-tasks i.e. the coming up of specialization between firms; thus many interrelated specializa-

tions support the interrelated interactive learning (also emphasized by Araujo & Kerndrup, 2001), which with the support of formal science, also permits the coming up of new tasks, new specializations, new industries, new products, etc.

This learning, arising from technical and economic problems embedded in the division of labor initiations, can explain the Schmooklerian (Schmookler, 1966) coming up of formal science, and its endogenous growth (Padhi, 2015c). This would typify the coming up of the formal sophisticated capital goods sector. Industrial differentiation, as a process has an additional advantage. If this transition towards sophisticated industrial differentiation-based growth highlights the domestic capabilities in the specializations in narrow lines (e.g., in knowledge-based trading that includes the knowledge-based service sector, say in designs, modern trading, transport, and importantly, in sophisticated capital goods sector, etc.).

It is clear that this transition, especially amounting to specializations in capital goods sector (and its dynamism in terms of knowledge gathering processes) also supports the transition towards the sophistication in agriculture; it is but true that developed status in agriculture (importance, led by private investment) in most of the developed countries followed their strong manufacturing base. This understanding then underscores a Yungian version of the Kaldorian manufacturing as an engine of growth thesis.

Then, this urban-centric growth process (as an alternative to Schultzian the-

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sis-led Liptovian conception of food security) ensures food security. However, in the present paper's conceptualization, the spillover effect in terms of the modernization of agriculture (and its possible positive impact on non-farm rural activities) should refer to finance-led investment in agriculture that adds to the aggregate market size (in the Keynesian fashion), to add to the overall growth process. The problem could be that without the government support base, the higher risks associated with agriculture may not induce the required private finance-led investments. The present paper's focus however is not on the (further elaboration of the) direction of causality that defines the coming up of modern agriculture, which now, through various inter-linkages can transform the non-farm rural sector (Murdoch, 2000); the present focus is on how the industrialization that supports learning also induces an organizational form that in turn makes possible the industrialization that can embody strong dynamic urban-rural linkages.

Large-Small Firms Nexus

The Youngian "specializations breeding further specializations" process and the underlying advanced learning by doing to improve mechanism results in a sophisticated industrial differentiation in

which there are not only narrow specializations in production related sub-tasks, but also narrow specializations in different aspects of financing, marketing, transport. In addition, the process supports increasing specializations in knowledge gathering, formal science, etc. that are impacts of the sophisticated learning by doing; the inter-linkages that the specializations call for also indicate the coming up of modern service sector, which as a specialization looks after information gathering, processing, etc.

The broader policy focus could be on the nature of firms, or organizational forms of firms, that could support proper carrying out of the varieties of specializations. Most important perhaps, the organizational form of firms should be so oriented that the carrying out of the specializations also permits the sophisticated learning by doing to improve that induces in turn new specializations in terms of new products, new sub-tasks, new industries, etc. In this sense, the organizational form of specializations adds to growth momentum.

To start, smaller firms would define a single owner-manager proprietorship; the characteristics of proprietorships (Bains, 1958) highlight some advantages and disadvantages that are not much discussed in the literature. To take up the advantage first, proprietorship implies the complete identification of any one individual (owner-manager) with the firm, and the ability of the firm is defined by the (bounded) ability of the individual owner/manager. This inalienable specific ability, however, is more adaptable to any one-skill set, but the individual concerned has the inherent capacity to specialize (further) in that skill set. The individual also has the incentive to 'learn' that adds to its skill set if such further specialization commands higher price (higher real profits). The small firms provide the incentive for the learning process because if it translates into new investment opportunities (and defines the new source of profits), it adds to the personal income of the owner-manager concerned. Therefore, in the industrial differentiation processes, the production of the specialized sub-tasks should be left to the smaller firms, each firm concentrating on a particular sub-task. If small firms concentrate on specializations, and there is learning by doing to improve, these firms provide the incentive for such improvements (see Arrow, 2000).

In the industrial differentiation processes, the production of the specialized sub-tasks should be left to the smaller firms, each firm concentrating on a particular sub-task.

However, small firms face a basic constraint. Specializations in sub-tasks have to be seen as an interrelated whole, and target larger output (and market). This then calls for different specializations in diverse fields. However, any particular individual (i.e. small proprietorship) with particular skill sets may not effectively manage such larger concerns. That is, beyond production related tasks, these firms cannot attend to the requirements of a growth-orientation of the firm

that otherwise requires diverse skill sets, say, in marketing, in transport, in inventory management, etc.

It can be argued that the firm can target larger size (and volume of output) that can permit to employ professional managers with diverse skills (at lower unit costs). However, the larger production requires larger outside (external finance), which, allowing complete liability (and risk), in the context of proprietorship, would not be forthcoming. To elaborate, the complete identification also enjoins the complete liability of the individual, with the implication that any larger ambition comes with higher risks at an increasing rate, defining the financial constraints i.e., the lack of formal finance, for any growth-oriented ambitions. The implication is: without diverse skills/finance-based growth possibilities, and facing skill/finance constraints, most of these firms can rely on traditional institutions for support, which (i.e. the traditional parameters defined by family/social ties) in turn can inhibit their advantages with respect to learning by doing to improve.

In contrast, a typical large firm is a typical corporation, which is a legal device to remove the finance and ability constraints (that otherwise face the small proprietorships). However, even if (therefore) such larger firms can have the ability for achieving higher growth prospects, they face constraints. The growth prospect depends on continuous technological progress, which in turn depends much on the incentives for the learning by doing to improve process. Here, the learning by doing is captured by individuals with the firms and such human capital is inalienable (Burton-Jones & Spender, 2011). What is important is that even if there is the learning by doing by some individuals, the larger organization forms do not provide the opportunities (because of impersonal nature of work culture that it breeds) or the incentives (i.e., personal gains) to the individuals to come up with new ideas (Arrow, 2000).

Dynamic Organizational Form

The above understanding of larger and small firms, in fact, advocates a particular type of small-large firm nexus that is important for the dynamism of both sets of firms, taking forward the industrial differentiation process. In an important sense, larger firms provide the basic dynamism. It could be that these firms grew out of the Youngian division of labor processes. Their ability to undertake finance-led investment opportunities arising in the division of labor in turn (in the Keynesian manner) supports the growth of demand and specializations. In the advanced stage however, the larger firms are in a disadvantageous position with respect to learning by doing to improve that supports further specialization related growth momentum.

The smaller firms provide the crucial support base in terms of the outlet for learning by doing-based new investment opportunities. Since, the learning by doing is in sub-tasks, intermediate goods production, what is important is that the small firms define successful industrial

districts. If many specializations take place in close proximities, it allows a knowledge flow, which can bring forth the creation of still further narrow specializations, which can be seen as an innovation. The existence of small firms-centric industrial district means the firms concerned would be in a better position to learn from each other's innovation, which means innovations create externalities, which leads to further innovations (Marshall, 1949: 225-7; Schmitz & Nadri, 1991; Bell & Albu, 1999).

The existence of small firms- centric industrial district means the firms concerned would be in a better position to learn from each other's innovation.

The larger firms' specialization is different and lies in the managerial abilities (to process information) to achieve higher market reach (that learning by doing opportunities provide), access better financial resources, to achieve economies of assembling/coordination of different interrelated specializations/sub-tasks. These abilities permit the competitive advantage to the firms, say, in terms of the strategies such as carrying excess capacity etc., which are crucial for larger market share. They also have the access to advanced formal science (again at lower unit costs), and in a position to collect information about new processes/ product, etc., process it, reinforcing the interactive learning process, to come up with new specializations. Last, if the new idea generated by small firm has diverse and multiple uses, it cannot take them all up; a large diversified firm would be in a better position to capture such new opportunities (Clarke, 1984).

The exact nature of inter-linkage of small and larger firms, the specificity of the dynamic nexus, however, is an open issue. There have been discussions on the larger firms' support to industrial clusters that add to the innovations-led successful industrialization (Schmitz & Nadri, 1991; Bell & Albu, 1999; Uchikawa, 201; for a critical review of the larger-firm centric industrial districts, see, Bagchi, 1999). On the other hand, there is evidence of newer and more dynamic operational form (Saxienian, 2000) in which small firms-centric clusters/industrial districts, and autonomous growth of them, provide crucial technological improvement support to larger firms. In fact, the literature tries to show that it is successful clusters that support/ induce large firms (Schmitiz & Nadri, 1991); this could be true; dynamic organizational forms of smaller firms could provide the competitive environment for technological improvements, and industrial economics (Clarke, 1984) also show that such firms' contribution to major innovation is significant. In this sense, in different growth phases, in defining the forces that shaped the developed countries, different organizational forms had had their important role to play (Ballandi & Propris, 2015; Belussi & Caldari, 2009).

Therefore, it can be argued that if Youngian-Kaldorian process where growth of demand and specializations are underway, the dynamism of larger firms,

with their specializations play an important role; however, the growth process would be limited if it translates only into larger firm-centric structure. The smaller firms supported by proper organizational forms that carry forward the small firm-centric specializations would underpin the crucial learning by doing to improve-led innovations, to maintain (and enhance) the basic growth momentum.

Towards Possible Urban Rural Nexus

The basic focus is on the possibility that sophisticated domestic industrial differentiation provides an alternative paradigm of rural development that is based on the dynamic industrialization process itself. The present paper proposes that the small firm large firm nexus, underlying industrial differentiation, should be translated into a city-small town-village nexus. For example, larger firms with their specializations can concentrate in the cities, whereas the small firms can define small town-based industrial districts that have strong village linkages, say, as per Basant's (1994) findings (cited in Lanjouw & Lanjouw, 2001), villagers commuting to nearby towns for work. Lanjouw and Lanjouw (2001: 15-16), drawing upon Hayami (1997), highlight the rural impact of the possible sub-contracting practices of urban firms; the focus however is on the possible advantages of low labor costs.

The present paper has a different understanding of the rural impact that emanates from the small-large firm nexus and needs elaboration. The smaller firms define individual centric production units that can take place in a smaller town setting; in addition, the smaller towns, with individual space (and time) to discuss and reflect on the workers' technological and economic problems (emanating from production), can promote the individual centric learning by doing process with respect to improving the production related tasks. On the other hand, larger urban centers not only provide the infrastructure to reduce the transaction costs i.e. increase in the efficiency with respect to the information flow to access better finance, higher market reach, etc., enabling the existence of larger firms who coordinate the production related tasks with other (financial, market reach related) tasks. They also provide the platform to evaluate (for competitive purposes) the advantages of many different new ideas coming from different smaller towns, which via interactive learning reinforces the effective formal science, which in turn supports the coming up of still newer tasks, ideas, etc.

In fact, the growth process would highlight possible transformation of urban areas from pure administrative units (to reduce transactional costs) towards urban centers that cater to the service-centric growth of larger firms oriented more towards formal science-based interactive learning, reaching out to larger markets, accessing greater finance, etc. However, the basic growth momentum would be derived from smaller firms in smaller towns with their propensity to innovate further. What is emphasized is: growth indicates important role of urban-centric advanced formal science, but,

then, the growth of effective advanced formal science would be based on interactive learning and new ideas/improvements that are generated by the small town- centric small firms.

In a way, the possible rural impact discussed here follows the symbiotic relationship between learning by doing taking place in smaller towns and growth of formal science that in turn add force to the growth of new specializations and growth of demand. If so, it should be emphasized here that the present focus is not on possible dynamism as such of rural small firms, but on the rural impact of small firms in small towns that have dynamic small-large firm inter-linkages. The rural impacts of dynamic small firms that emerge from a sophisticated industrial differentiation process would, therefore, embody sophisticated human capital with respect to managerial and technical abilities (that supports their learning capacities and inherent abilities to grow).

The industrial differentiation process in fact focuses on small firms-centric higher specialized employment opportunities that generally would come with higher wages (Padhi, 2014; 2015a): in fact, as discussed above, if these can translate into better employment opportunities for the rural labor force and it is this higher rural income that has the ingredient to transform the rural spending/preference pattern. The spending pattern in turn influences secondary employment impact; beyond the dynamic small-large firms nexus, there are many independent small firms in manufacturing and services, say, engaged in retailing, food stalls etc.; their endogenous growth propensity being low, their output capital ratio (or firm income source) directly depends on (exogenous) prosperity of the regions.

If government revenue adds force to small towns' infrastructure, ability of the small towns to add to growth momentum and induced government revenue would increase

In addition, the interactive learning by doing processes of small firms in small towns would but have favorable impact on rural areas in the vicinity; for instance, the rural employed labor force acquires knowledge and technical skills associated with constant coming up of new specializations. It can be argued that the dynamism of small firms would stipulate educated employment opportunities in smaller towns, but low development of basic facilities, such as education and health (and recreational) systems, for instance, can be a hindrance. However, the new smaller towns, now, are viewed as new centers of finance-led new resource creation, and if it has a magnified Keynesian income effect (via dynamic urban rural nexus), they can also be the new source of government revenue. Then, one can posit Wagner law's symbiotic logic in which if government revenue adds force to small towns' infrastructure, ability of the small towns to add to growth momentum and induced government revenue would increase and so on.

Policy Relevance

There are serious issues/challenges facing possible dynamic gains of large-small firms' nexus. There are Indian case studies that show that most of the small-large nexus, say, a broader form of sub-contracting organization forms, and industrial districts, face constraints and indicate dysfunctional forms. Here, the different forms of subcontractors (Nagaraj, 1984) are not important. The focus has to be on the nature of subcontracting system, whether it defines captive or relational systems (Uchikawa, 2011). In fact, mere subcontracting is not important. For instance, if the larger firms are in an advantageous position (even taking advantage of government incentives towards 'small' firms), without permitting the independent existence and the growth possibilities of the small firms, there is not much dynamism in this organization form (Chaudhury, 1999). If, by nature, this organizational form defines the growth prospects, technology (Gupta & Goldar, 1999) and the profit margin of the small firms, without the independent existence of such firms, the scope of learning by doing at the level of these small firms would be low. In addition, if one allows for the fact that learning by doing in the larger firms is problematic, this organizational form may not allow for much dynamism. In this set up, small firms are not small in an organization sense, but their small investments could be instances of vertical 'disintegration' traced to the aim to take advantage of incentives to small firms by government (Bagchi, 1999). In fact, the low incidence of specialized small firms in India (Nagaraj, 1984; Gupta & Goldar, 1995) in a way highlights the failure of the policies.

However, a focus only on performance evaluation and mere policy support for encouraging dynamic nexus can do that much. The present paper in fact argues for a policy focus that should zero in on missing advanced growth processes. The policy focus then is on aggregate demand support that translates into expansions of larger volume of output and that embody specializations in intermediate goods related sub-tasks. If this aggregate demand is lacking, profits expectations and value attached to capital to be embodied in intermediate goods specializations would be low and the dynamic nexus, based more on intermediate good specializations, would be a non-Starter.

The literature shows that higher market access and developed status with respect to market highlights the existence of well-developed clusters of small firms, defining successful industrial districts that allow for more successful and dynamic inter-relationship between these small firms and the larger firms (Banerjee & Nihila, 1999; Saxienian, 2000; Uchikawa, 2011). In fact, it can be hypothesized that industrial district-specific sub-contracting type of organizational forms are more successful when it is based on a devel-

Industrial district-specific sub-contracting type of organizational forms are more successful when it is based on a developed status in industrial differentiation.

oped status in industrial differentiation, reflecting the specializations between the firms (Swaminathan & Jayaranjan, 1999) with a developed networking system (Saxienian, 2000).

Here, we maintain that the policy focus is on growth of demand, associated necessarily with growth of specializations, provides the basis of possible success of such districts/cluster; the larger firms also play an important role and the decisive role, only when their growth plans conform to the Youngian-Kaldorian growth of demand. If successful industrial districts are defined by use of specialized machinery for the purposes of narrow specializations, the role of larger firms are important. If the larger firms initiate finance-led division of labor and are based on within the firm specializations, capture higher market share and also adds to aggregate demand (Kaldor, 1972) that create the market for narrow specializations, inducing specialization between firms and net-working systems. To this it can be argued that: (i) there are instances of successful industrial districts without the support of larger firms and (ii) there are also instances of larger firms that reduce the incentives for innovations in the industrial districts. Let's take these issues in turn.

There are instances, especially in India, of traditional community/joint family based industrial districts in which different members of the community specializes in different tasks and the networking can remove some aspects of financial/skill constraints (otherwise) facing individual proprietorship firms. However, in a way, such traditional 'industrial districts' remain traditional with respect to a given set of supply (access to inputs/finance) and demand (market access) conditions, defined by traditional parameters. Being traditional-centric, they forego those opportunities that relate to growth prospect with respect to adaptability to changes in technology and consumer preferences.

The above observations could be true of other forms of traditional industrial districts in a typical developing country set up. Here, it can be argued that well-meaning education program can support the success of such small firm-centric organizational forms (Bagchi, 1997a), without the support of the larger firm. But here, education is used as a catch for all sense. If education is all about knowing the changing preferences and technology (in a global scale) that can be deduced without prior experience, the argument can make sense. But if the education is garnered from experiences and technical and economic problems induce formal science, and larger global firms – based on sophisticated industrial differentiation in the developed world – (say, through externalities or though former employees, as the experience of successful industrial districts in Spain) (Bagchi, 1997a) shows, then the role of such firms cannot be neglected.

Coming to the next point, the greed of larger firms, which act as the commissioning agents for small firms in industrial district, can hamper the 'good' employment growth that supports innovation (Bhattacharya, 1999). But it is clear that this state of affairs pertains to traditional small firms that typify lack of

growth opportunities. It is growth opportunities that depend on a symbiotic relationship between them and the ambitious large firms.

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The larger issue, as Kaldor (1981; 1983) noted, is: the individual initiative-led Youngian-Keynesian industrial differentiation process, based as it is on the 'initial success breeding further success' thesis, with cumulative disadvantages for those who initially lag behind; Krugman (1991) calls it the historical accidents. The present paper only adds that success stories of cumulative causation derive their strength from the dynamic organizational forms of small-large nexus, while lagging regions would highlight dysfunctional organizational forms.

Moreover, if one probes further to compare dynamic instances of industrial districts with that of traditional ones (in lagging regions), the difference would be in terms of accesses – to growing markets (and prospects of growing profits), to specialized intermediate goods and such employment base, etc. and the difference would boil down to differences in domestic manufacturing bases. As Stigler (1951), Porter (1990) and Rodriquez-Clare (1991) noted, it is the domestic base that highlights the existence of narrow specialist in narrow specializations that in turn permits the constant coming up of varieties of sophisticated intermediate goods that in turn provides the competitive advantages – and makes success cumulative. If so, the policy focus should, as Kaldor suggested, zero in on the necessity of industrial policies to stimulate the growth of the lagging regions; the present paper's focus would be on - the strengthening of the growth via dynamic small-large nexus (and the city-town-village nexus) to strengthening the overall learning by doing-based industrial differentiation cumulative causation.

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