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## Cashless-digital economy: 'Grey' surrealism?

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### Abstract

In this paper, I attempt to detect: why complete "cash-less economy" in India is hard to realize. My paper aims to detect the contributory economic factors to explain why the policy of complete digital payment in India is difficult to assess. The study tries to unfold a few facets in the context of the "grey" localization of informal industries and services inheriting a formal-informal linkage. Such an exploration is crucial to make a successful policy implementation. The incorporation of the scenario becomes further intensified within the realm of diversified heterogeneity in production with increased volume of informal "industrial districts" in India. The present paper consciously avoids the issues like demonetization and their significant "arrays" in this context in order to make the present study concise one by appearing with separate studies with them. The micro-level field surveys, sampling design and data analysis of the study is based on the standard model approach to avoid spatial homogeneity.

**Keywords:** Informal sector, Cluster, Location, Mobility

### 1. Introduction

In the present paper, my effort is to detect the contributory economic factors explaining the phenomenon: why the policy of digital payment system to initiate a "cash-less" economy in India is fetching far short of its targets in recent past. The study attempts to unfold a few contributory factors in correspondence to the "grey" informal localized economy in India. To do this, it is accrued that the changes in the nature of Formal-Informal linkages, especially after globalization, has made the scenario further intensified within the realm of diversified heterogeneity of the informal localized economy with its increased volume. To infer this within a theoretical realm, the present paper consciously avoids the direct influences of the issues like demonetization and its influences to the digital payment system in order to make more precise comments on why a complete digital economy in India is far from the reach.

### 2. Methodology of Analysis

The logical argumentation of the study is based upon literature support, case studies conducted and primary survey results. The survey process is exhaustive. The survey is based on qualitative purposive sampling with semi-structured questionnaire and indirect interview method. The micro-level field studies, sampling design and data analysis procedure are based upon the standard model approach. The implication is that the selection of any sampling window does not depend on data availability (or non-availability), hence avoids spatial homogeneity. However, the spatial distribution of sample units is cross-sectional, given and known. Sometimes an ethnographic study has been approached due to data non-availability and data non-responses in the sample survey area under the purview of the study.

### 3. Hierarchical Structure in Operation: Formal-Informal Linkage Frame

The "Bottom of the Pyramid" structure of industrial organization after globalization causes significant arrays to informal sector production. The informal sector producing units, even small in operational unit(s), have to compete with the formal sector firms producing similar products or services in a competitive market structure. Further, the informal units are generating employment for other informal workers by following hierarchical production chains allowing both horizontal (spatial) and vertical (hierarchical) segmentation within the frame of informal labour market. In the process, the formal sector performs as the purchasers of intermediate and/or semi-finished products from the informal firms through out-sourcing, thereby allowing several intermediaries to operate within the existing production chain.

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The production relations cross geographical borders over states within the country, even between countries.

The hierarchical structure in operation starts with Own account operators who are the informal producers exchanging products and labour services with the competitive formal sector through networks with independent own account units with “pure” or “open” market exchanges [Chen 2006] <sup>[1]</sup>. Some informal enterprises (even own account operators) produce goods within a Value chain in production through sub-contracting, putting-out and out-sourcing (the volume of which has simply increased after globalization) with some other informal firms - terms and conditions of the transactions controlled by the lead firms (mostly formal units). Some informal Sub-sectors, even own account operators, operate through domestic chains in which producers directly collect production orders from the lead firm (the formal units).

The informal Contractors or Intermediaries collect production orders from the formal (even from informal) firms, produce without direct competition with the formal sector producers over price, out-source the production orders to the informal sector producers, and simultaneously provide service to the formal and informal sector by forming a formal-informal linkage to ensure work-orders to the informal producers and timely-delivery of finished/semi-finished product to the formal sector firms particularly at the time of their heavy work load. Then there are Formal Labour who operates in formal units with better work conditions and coverage of effective social security benefits collect work-orders for the informal sector operators and collect their semi-finished products to deliver them to the formal sector producers <sup>[1]</sup>.

The evil effects of a full-length digitalization in payment system in an economy like in India start to function from here. Actually, a large part of payment appears in cash-less mode at the “Bottom of the Pyramid” of the structure that actually conveys significant arrays to the “relay” functions in a multiplies effect impeding lack of out-sourced orders form the “Tops” of the “Pyramid” to the small informal operators at the “Bottom” of the “Pyramid”. The lack of work-orders from the formal and/or informal sector to the small informal operators intensifies the situation in an adverse manner.

#### **4. The Informal Institutions to Control Labour and Skill**

Apart from cash payment, the informal industrial organizations often attribute some informal institutional framework in order to address exploitative contract system and tied-labour kind of relationships in the informal labour market structures. As I have referred previously, an experiment may be cited from the “Loss-Wage Model” of the Indian Gems and Jewellery industry in which the informal workers are eligible to claim small bits of gold particles (not gold dust) that come-off as small chips while working with raw gold thereby getting an access to a share of costly raw material (capital) <sup>[2]</sup>. The workers who claims a natural right over it collects the gold particles. This loss of raw material for the producer which cannot be prevented is a gain for the worker in the form of a compensation for the low money wages paid to him <sup>[3]</sup>. The workers utilize this gold by accumulating particles and finally work upon the gold to carve out an ornament for sale performing within the hierarchical structure of formal-informal linkage, thus realizing a profit without investing any capital <sup>[4]</sup>. Until a

labour is not skilled enough to earn this wage-in-kind, he remains tied within the industry initiating a tied-labour kind of relationships and also preventing inter-firm transfer of skill and labour.

This countervailing force to spatial migration ensures creation and sustenance of a “core group” of skilled labour in a particular geographical space thereby contributing to the formation of informal localization through the mode of payment. Such a tie-up form of labour without much flow of (skill) labour becomes possible even in the free-flow globalization regime. A dual share of labour and capital by the labour-cum-entrepreneur emancipates an arrangement of an informal mode of social security within an informal industrial set up. This unique cash-less mode of payment acts as an invisible mechanism to keep labour tied to a particular firm within the industry to ensure continuation of the growth of the industry. No digital payment system is ready to substitute this informal institution of labour control to continue industrial growth – rather an immediate substitution of it with cash-less digital payment system would hinder industrial growth and employment in an adverse manner.

#### **5. The Execution of Knowledge Externality**

To comment upon how it works on industrial growth, it is the immobility of this entrepreneurial income at destination results in increased volume of industrial investment, production, and employment generation [New Economic Geography Synthesis, Venable’s (1996)]. An increased “labour market pooling” inheriting the Home Market Effect (HME) due to larger knowledge externality by which the geographically concentrated industry generates an additional demand for its products and “network” <sup>[5]</sup> employment particularly in the peripheries <sup>[6]</sup> of large urban locations and other distant destinations has not worked. An increased volume of vertical (hierarchical) labour mobility contributes further to faster industrial growth <sup>[7]</sup>.

#### **6. A Crunch in Privately-initiated Informal Localization**

What is crucial here is that many of the informal operators are operating in informal localization that do not develop arbitrarily - there are significant economic factors influencing formation of an informal cluster of industry (or a group of industries) and businesses <sup>[8]</sup>. The industry or business in one location within a cluster with repeated transactions among themselves promote better coordination, trust, and informal linkages between industries or businesses, better efficiency, effectiveness, flexibility, management linkages in partnerships and alliances, and many others. Any random shock as provided by the event of demonetization and digitalization in “cash-less” payment system appears to be sufficient enough to transfer a harsh and negative contribution to all these factors in their co-ordination. The stochastic behavior of any such random shock directly hinders horizontal spread of the industry through Marshallian “primitive localization” behavior within an informal “industrial district” formation. To Scitovsky <sup>[9]</sup> (1954), “information spillover” due to “labour market pooling” promotes adverse influences to firm’s production function by negative execution of “pure” external economies consistent with imperfect competition and some market power within an informal set up at the firm level <sup>[10]</sup>.

It is to refer that government and/or government-sponsored institutions are not able to create an industrial organization with collective efficiency - rather a minimum concentration of privately initiated industrial activity may involve therein [Becattini (1989, 1990)]<sup>[11]</sup>. The impact of “cash-less” digital payment system immediately after demonetization has simply conveyed a negative influence to this private initiation thereby has adversely affected agglomerated concentration of small informal enterprises within localized “industrial districts”<sup>[12]</sup>. The result may be accrued to the new growth theory context [Paul Krugman (1991)] that fall short to attract competitive informal enterprises within the localization. The outcome is the absence of the dominance of small and medium firms producing with the Marshall-Arrow-Romer (MAR) externality allowing knowledge spillover with an increased concentration of an industrial firms within a specific geographical region, thereby promoting incentives to further inter-firm spillovers executing positive economies of scale. The execution of Jacobs and Porter externality suggesting local competition as suitable to extract knowledge externality by the firms did not worked effectively in case of digitalization in India majorly due to lack in trusts and adaptability even within a highly-developed social capital network within an informal set up. The negative incorporation of the two factors is that of execution of negative economies of scale and knowledge spillover that adversely affected concentration of firms within informal localizations.

A circular causation<sup>[13]</sup> of all these provides maximum individual interaction in the informal industrial periphery from the industrial “core” with well-established social capital network<sup>[14]</sup>, which have not worked. Rather, the functioning of the “spread effects” accrued from the “core” of the localization has impeded negative influences to the process of eventual development of the peripheries through multiplier effect on their employment and output and a “relay” function has appeared to function through urban hierarchy at the peripheries from the “core”. The growth of the negative incentives of the informal “localized” producers has made significant negative arrays to the spatial production patterns that have incorporated negative influences to the growth of the informal economy.

## 7. The Concluding Remarks

The nature of the Formal-Informal linkage paradigm has changed due to the hierarchical “Bottom of the Pyramid” structure of industrial organization after globalization with increasing volume of out-sourcing, putting-out and sub-contracting thereby causing “jobless growth” of the formal sector and simultaneously a horizontal spread of informal localization in different industries and services in India. The policy makers have to successfully capture this changing scenario in order to make a policy implementation an effective one. It is appearing to be quite ambiguous that the “grey” informal counterpart of the economy is confusingly treated as the “black” economy in some of the recent policies – which is appearing to be a contributory economic factor hindering to grab the desired successes of the policies like “cash-less” digital payment and demonetization in India. Due to the informality inherent within the economy, a “less-cash” economy is a better option.

## 8. References

1. Ref: King, 1974; Breman, 1976 Bose, 1978; Bienfield,

1975; Weeks, 1975; Breman, 1977; Papola, 1978; Tokman, 1978; and Peattie, 1980; John Harriss, 1990; S. V. Sethuraman, 1992; Breman, 1996; Levenson and Maloney, 1998; Ranis and Stewart 1999; Harriss-White and Gupta, 2001; Maloney, 2004; Kanbur and Guha-Khasnobis, 2006; Devey *et al*, 2006; Marjit and Maity, 2006; Chen, 2006; Perry *et al*, 2007; Pieters *et al* 2010; Breman, 2010; Meagher, 2013.

2. This is a natural loss of 4-6 per cent of the gold particles which occur in carving out intricate designs or making thin wire out of gold with the help of tools.
3. The loss of raw material in kind for the producer and gain in wage for the worker is commonly termed as ‘loss-wage’ and is not declared or announced openly.
4. While the cash wage remains within the range of Rs. 5,000-6,000 per month, a skilled worker additionally earns an equal or more money through this unique mode of payment made in terms of a proportion of the expensive raw material.
5. Migration “networks” are defined as sets of interpersonal ties that connect migrants, former migrants, and non-migrants at the origin and at destination through bonds of kinship, friendship and shared community.
6. To the revised version of the Central Place Theory of Walter Christaller (1933) by August Losch (1944, 1954), the spatial economy of the region then tend to be dominated by a central primal city, the hinterland of which owes to be characterized by smaller settlements and alternating areas of industrial concentration and dispersion.
7. Several researchers have shown, by using “labour frontiers”, that migration tends to decrease only at later stages of the development process of any region and the region is transmitted from net labour exporters to net labour importers (Bohning, 1994; Rotte *et al*, 1997; Olesen, 2002).
8. To examine the issue informality and its localization in any particular industry, the search for its literature support may be searched from the literature of Alfred Marshall (1890, 1892) in his “industrial district” concept with spatial concentration of small and medium enterprises – though the analysis of location started much before than Marshall with ‘monocentric city model’ of Von Thunen (1826) [Von Thunen’s “Der Isolierte Staat in Beziehung auf Landschaft und Nationalökonomie”].
9. To Scitovsky (1954), incorporation of imperfect competition initiates internal economies of scale that implies market power. Scitovsky distinguishes between “pure” (technological) and “pecuniary” external economies. The former affects firm’s production function (e.g. Marshallian “information spillover”).
10. The Christaller model of central place is, however, inductive rather than deductive in the sense that the model is primarily based on observations rather than exploration of any schema constructed from first principles. To Parr (2002), the Loschian approach is completely deductive and a microeconomic foundation has been approached to understand the urban system. It shows that industrial concentration and urbanization may arise independently of local peculiarity and particularity.

11. In the Big Push theory (Rosenstein-Rodan, 1943), the solution to the insufficient size of the local market is referred to a co-ordinated (government-led) expansion of investment - hence big push enters into. This enables firms to reap the benefits of economies of scale effect, thereby promoting industrialization of a backward region. Without such a big push, the backward periphery cannot catch up with the core.
12. The term 'agglomeration' of firms refers to decline in average costs in production as more production occurs within a specified geographic area [Anas, Arnott and Small 1998]. In other words, it relies strongly on increasing returns to scale, considering internal and external economies of scale.  
Cluster of enterprises is a geographical concentration of micro, small, medium and large enterprises producing same or similar type of goods and services.  
As referred by Brulhart (1998), while concentration analyzes location across space of a few well-defined sectors, agglomeration analyzes location across space for a larger part of economic activity, and specialization deals with share of a particular location in specific industry in comparison to share of other locations in that industry.
13. In 1957, Gunnar Myrdal introduced the concept of circular or cumulative causation. In this, once a region (or country) takes lead in the process of economic development, positive external economies of scale in the region (or country) appears there – which ensures that the location will become an attractive place to invest and more attractive location for the labourers to work. The existence of strong localized spillovers leads to the establishment of a core in the region with large market and a periphery [Dicken and Lloyd 1990].
14. Social capital is social organizations (such as trust, norms, reciprocity, co-ordination, interactions belongingness and networks) between producers and workers that facilitate better co-ordinated actions among themselves.
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