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Business Groups in India and Japan

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Abstract

This paper starts by discussing Asian business systems, their institutional characteristics and the types of Asian business systems. For example, on the job training is more prevalent in Japan, Korea and Taiwan and Asian business groups are usually controlled by a family or is state controlled, with Japan being an exception. The main types of Asian business systems are classified as post socialist, advanced city economies (e.g. Singapore), advanced Northeast Asian (e.g. Taiwan) and the remaining. We further discuss the effect of multinational enterprises on Asian business systems, which has been significant and the same could be the experience with Japanese multinationals in India. We then go on to discuss business groups in general, which is a prominent feature of Asian business systems. First we distinguish between business groups and other structures such as conglomerates in terms of their internal structures and management. This is followed by a discussion on the difference between business groups between developed and developing economies. Another critical issue is the factors behind the creation of business groups, such as imperfect markets. It may be surmised that as an economy develops the reason for the existence of business groups disappears. After that we look at the features of Japanese and Indian business groups. Finally, we discuss three papers on location choices of Japanese firms, management of alliances and strategies of Japanese firms, respectively.

Key words: Business groups, types, MNE, family owned, tunnelling, Keiretsu, location

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1 Introduction

Economic ties between India and Japan are expanding. Japan is the largest bilateral donor to India and the footprint of Japanese firms in India continues to expand. What would be the likely impact of this investment and enlarged economic relationships? The effect may be no different from investment by other countries: an increase in the capital stock of the nation and possibly increased productivity partly because of improved processes. However, given the experience of some countries the effect of Japanese investment may be qualitatively different. (Urata 1993, Koike 2004).

Within the literature on economic development of Asia there is a thread which discusses the role of Japan. There is a notion that Japan was the first Asian country to become a modern industrialized nation and that it was instrumental in the spread of modernization in its neighbours. First, in Taiwan and South Korea, its erstwhile colonies and then to Southeast Asia and China. This is in essence the flying geese model with Japan acting as the leading goose and the other Asian countries following in its wake. This theory is probably too generous about Japan's role in the economic development of Southeast and East Asia, but it is undeniable that Japanese investment played a considerable role (Encarnation 1999). It is conceivable that given the interest shown by Japan in India of late a similar role is conceivable in the near future.

We will leave aside the issue of the effect of Japanese investment in Indian development. To delve into the issue would require longitudinal data of some length for any effect to emerge. Instead there are other more micro level issues that one may choose to explore. One such issue is the role of business houses in Japan and India. This is particularly interesting since large family held business groups are very prevalent in India while the famous horizontal Japanese business groups, the keiretsu, are reportedly dead and vertical business groups are also dying out. The Japanese business system is more like Western business systems according to Witt and Redding, 2014 while the Indian business system is more like former socialist economies. How will these two supposedly very different types of industrial organizations interact? It should also be remembered that Japan had family owned business houses like that of India, the zaibatsu, before the second world war. Ghosh (1974) commented on the similarity of the industrial organization of Japan and India, in terms of concentration in 1968. The zaibatsu were disbanded during the American occupation of Japan but soon remerged as the Keiretsu, though without family ownership. So in the not too distant past Japan also had business groups. Is it possible that some kind of keiretsu like structure will emerge among Japanese firms operating in India or between Japanese and Indian firms? It would be interesting to see if Japanese companies restrict their relationships with stand-alone Indian companies or do, they transact equally with firms that belong to business houses.

One argument suggests that business groups emerge due to market imperfections and that as the economy becomes more advanced arm's length transactions are encouraged and business groups with unrelated product portfolios wither away. If so, one may suggest that the Indian market is far from perfection of any kind as suggested by the prevalence of business groups. Given this state of affairs should Japanese firms re-establish their networks of the horizontal and vertical kind in India. Bassino, Jensen and Morini (2018) suggest that Japanese firms replicated their network structures in ASEAN countries. If they do so will some Indian and Japanese business groups be drawn into special relationships. For instance Reliance Industries, part of the Reliance group has business links with Mitsui, while the Anil Ambani of the ADAG has announced partnership with Nippon Life to channel Japanese investments in India and to eventually partner to set up a Reliance Bank in India. It would be interesting to see what kind of relations Japanese firms form with Indian firms.

There are many reasons why a comparison of Indian and Japanese business groups may be useful. The primary one is technology transfer, or product and process innovation. It may be the case that networked (formal or informal) firms find it easier to propagate processes and know how. To the extent we believe that Indian firms (domestic or foreign) can move up the value chain and produce high end goods the effect of such spill overs would be useful. Other reasons would be the different styles of corporate governance that is practiced. Japanese management is, we are told, more consensus based while India is hierarchical.

In section 2 we will provide a discussion of Asian business systems and the impact of multinational enterprises (MNEs) on Asian business systems. Casual empiricism suggests that the impact of foreign multinationals on the Information Technology (IT) and other high tech sectors in India have been immense. It is possible that Japanese MNEs could have a similar impact on the Indian manufacturing sector. This is meant to provide a foundation on the basis of which we can discuss Indian and Japanese business groups. We follow up with a discussion of the structure of business groups and the rationale for their existence in Section 3. We will then go on to discuss Japanese business groups in Section 4, followed by Indian business groups in Section 5. In Section 6 we discuss three papers by Horn and Cross (2016), Varma et. al. (2015) and Kondo (2012). In a sense we start with the most general discussion and then proceed to get down to a more granular level. Section 6 provides a glimpse of the situation on the ground. Horn and Cross (2016) analyse the location choices of Japanese firms in India. Varma et. al. look at three cases of joint ventures between Indian and Japanese firms and draw lessons of the factors that cause success or failure. Finally, Kondo discusses the strategies adopted by Japanese firms in India and compares them, unfavourably, to those of Korean and western firms. The methodology for this paper is based on reviews of the existing literature and the objective is to discuss Indian and Japanese business groups.

2 Asian Business Systems

To understand the relationship between Indian and Japanese business groups it is useful to visit the varieties of capitalism debate (Hall and Soskice 2001) and to look at the general structure of Asian business systems, a significant part of which comprises business groups. Witt and Redding 2014, suggest that the standard classification of Coordinated Market Economy (CME) (e.g. Germany) versus a Liberal Market Economy (e.g. USA) does not apply to Asian business systems. There is much more variety and in fact the differences between Western business systems seem minor when compared to Asian ones. They summarize the institutional structures of thirteen major Asian business systems – those of China, Hong Kong, India, Indonesia, Japan, Laos, Malaysia, the Philippines, Singapore, Korea, Taiwan, Thailand, and Vietnam – as well as those of five major Western states – France, Germany, Sweden, the UK, and the USA – as comparison points. Their approach represents a mix of statistics and qualitative data.

2.1 Institutional Characteristics:

In majority of Asian economies, the acquisition of professional skills is left to private initiative, exceptions being Japan, Korea, and Taiwan, where on the job training (OJT) is prevalent. In terms of employment relationships the dominant organizational principle is the company union. Major exceptions to the rule are the nominally socialist economies of the region, that is, China, Laos, and Vietnam where party controlled unitary unions are prevalent. The main source of external financing is banks. A common pattern is that business groups maintain their own banks or similar financial institutions, which they can tap for long-term funding. Credit allocation largely depends on relationships with banks and the state. Business groups are present in all Asian countries and are usually large conglomerates that are owned and/or controlled by the same party (family or business) with Japan as an exception. Its business groups, the post-war Keiretsu, which is pretty much extinct, had no one ultimate owner or controlling party. Major decisions in Asian firms rest in the hands of top management, but Japan features a relatively participatory mode of decision-making cutting across levels and functions. Along with ownership patterns, management control of firms usually also rests with families or the state. Decision-making in most Asian states is statist. The exception is Japan, which involves the participation of various sectors of society.

2.2 Types of Asian Business Systems:

To identify the different types of Asian business systems present in the sample Witt and Reading (2014) use cluster analysis.

The main Asian clusters are

1. The (post) socialist countries of China, Vietnam, Laos, and India.
2. The advanced city economies of Hong Kong and Singapore.
3. The remaining South East Asian nations.
4. The advanced North-East Asian economies of Korea and Taiwan.

The Western economies as well as Japan cluster separately from the Asian economies. Japan falls into the coordinated branch, between Germany and France. Further, Chinese private business broadly clusters with the poorer South East Asian economies. Indian private business is on the same branch as Chinese private business and the poorer South East Asian nations but splits off earlier into a branch of its own. This structural similarity of Chinese and Indian business stem from the similarity of their business systems: the inefficiency of the state institutions on which the economy depends, the vibrancy of the private sector, the dominance of bank financing, the power of personally dominated large firms with crony-capitalist connections being a few of them.

Their research suggests that the total number of known types of capitalism in Asia and the West is at least six and possibly as many as nine: four in Asia (post-socialist, advanced city-state, emerging South East Asian, advanced North-East Asian), plus some two to five in the West (including Japan). It would be useful to incorporate social capital (interpersonal or relational trust, and institutionalized or system trust), and cultural elements for business-systems analysis. The reliance on informality, so common in India, (reliance on informal institutions such as unwritten norms, conventions, or codes of behaviour) in a business system and its interplay with formal institutions should also be investigated. Another interesting feature of Asian business systems is multiplexity, which is the presence of multiple business systems within one economy. India, again is a prominent example. The presence of multiplexity raises important questions. One is what preconditions allow the coexistence of multiple business systems in the same institutional space. A second question relates to the concept of institutional convergence. If business systems converge, which one do they converge to. Multiple business systems within the same nation complicates the dynamics of convergence among different business systems.

It also raises questions about the compatibility and ability of Indian and Japanese business systems to work together. Japanese firms will not only have to deal with one type of business system, different from its own business system, but two. Further, the impact of Japanese firms may be to introduce yet another type of business system into India. So it would be useful to consider the effect of Multinational Enterprises (MNE) on Asian Business Systems.

2.3 The effect of MNEs on Asian Business Systems

Giroud (2014) provides a comprehensive account of the impact of MNE activities in Asian Business systems. As he notes the literature on international business has recognized for a long time the interaction between MNEs and the institutional structure of countries. MNEs have had to adapt to local conditions and institutions and in turn they have left their imprint on these. This is a continuous process. Adaptations made by MNEs in response to the institutional context is termed as micro-politics while the effect that MNEs have on the host country's institutional context is called macro-politics, which is the focus of Giroud's work.

It has been long recognized that a firm's activities, its strategies and its structure, and to some extent its competitive advantage, derives from the institutional arrangements in the home country. By this we broadly mean the structure of the employment system, the financial system, relationships within firms and the political system that binds it together. Firms from USA are more likely to rely on short-term, contract based relationships with workers and suppliers while Japanese firms may prefer more long term relationships based on cooperation and trust and not so much on formally defined contracts. Thus USA based firms may find it easier to work with the more dynamic parts of the private sector in India since it is to some extent it mirrors USA institutions. Japanese firms, on the other hand, may find it easier to work with the larger business groups in India since it has a history of business groups and has a system of coordinated capitalism.

The strategies that MNEs use can be characterized as efficiency seeking, market seeking and resource seeking. These will have different effects on the institutional changes in the host country. For example efficiency seeking firms will try and goad the government and municipalities to become more efficient in terms of ease of doing business and the provision of infrastructure. Market seeking firms will push for open trade and better access. They will push for access to areas of the market that are currently closed and may also support privatization and deregulation policies. Finally, those trying to get access to raw materials or human resources will push for better access to those resources. MNEs differ between themselves as to what strategies they pursue and MNEs from different countries can have different effects.

At the firm level the main channels through which MNEs change the institutional structures of the host country is through knowledge transfers, spill overs and linkages. The extent of knowledge transfer depends on the strategies of firms and the ability of local firms to absorb such transfers. USA based multinationals typically rely on local hires for managerial expertise while Japanese firms rely more on expatriates. Consequently, the possibility of knowledge transfer of processes is likely to be less in the case of Japanese firms. Of course it is possible that formal processes at the level of governments, as in the case of Japanese investments in high-speed rail in India, may accelerate knowledge transfer. The other possibility is to subcontract parts of production to local firms. Indeed, the participation and development of global value chains or production networks in Asia has led to significant improving in the technology levels in firms in Asia. The process has largely been led by multinationals from Western economies and Japan.

Spill overs also lead to knowledge transfers but indirectly. Economists term these beneficial externalities. MNEs, which once operated mainly in manufacturing, are now engaging in more R&D and their activities are getting more technologically sophisticated. This has resulted in higher productivity among local firms. Such effects may be transmitted either horizontally, through enhanced competition, or vertically, through substituting capital for labour. Spill overs are generally positive or small. However, there is also a negative side to MNE investment. They can drive away local firms or leave them restricted to unattractive markets. Linkages between MNEs and local businesses enhance knowledge transfer through spill overs, so it is important to build networks to increase linkages. Networks can be formal and structured or informal, such as guanxi networks in Taiwan. In such situations both sides have to adapt to build functioning networks.

3 Business Groups

The advent of the business group as an economic institution can be traced back to the early decades of the twentieth century, when large enterprises started gaining prominence, especially in the emerging economies. There were two types of large enterprises operating—state-owned enterprises with a focus on specific types of industries; and business groups with wide, unrelated (or related) product portfolios having pyramidal structures usually owned by families. While state-owned enterprises were on the decline by the 1980s, business groups remained central to large enterprises and have become an important subject of study due to the three features i.e., unrelated products, pyramidal structure and family-owned businesses. All of these are to some extent looked down upon. The pyramidal structure of ownership allows promoters with relatively small shareholdings to divert economic benefits from ordinary shareholders to themselves. These are typically family-owned businesses and economic power thus tends to become concentrated in the hands of a few elite families with its attendant social and political consequences. On the other hand, unrelated product diversification does not have the benefit of knowledge sharing and low cost of production which comes from producing related product categories and suffers from the conglomerate discount problem where the market value of the group is lower than the sum of individual units.

Business groups are organized under a collaboration mechanism between independent companies to enhance their collective welfare. This is different from the market mechanism under which companies usually operate when they coordinate through price signals in competitive settings. The literature on business groups recognizes two types of business groups: there are network-type business groups which function under the alliance principle, and there are hierarchy-type business groups which function under the authority principle. In network-type business groups functioning under the alliance principle, no individual firm holds controlling interests over other firms due to which most scholars consider them as business networks rather than business groups. In hierarchy-type business groups, there is a holding company at the top of the hierarchy which controls legally independent operating units via different economic mechanisms like equity ties, interlocking directorates and so on. Often these types of business groups are family-owned.

Hierarchy-type business groups incorporate two different perspectives and business arrangements, and hence are sub-divided into two categories – diversified business groups and pyramidal business groups. From the perspective of the development economics and strategy literature, diversified business groups consist of product portfolios that exhibit unrelated diversification and are legally independent firms operating in different industries under common control in the form of equity or family ties. Their organizational structure differs from the usual multi-divisional enterprise with related product portfolios which is the sort of large enterprise commonly found in mature industrial economies. On the other hand, from the perspective of the finance and governance literature, there are business groups that are arranged as pyramidal structures which consist of affiliated listed firms under a common shareholder having the largest controlling interest. In such arrangements, one group firm is a controlled subsidiary of another. This kind of arrangement may allow the tunnelling of profits at the cost of minority shareholder interests through the separation of controlling rights from cash-flow rights. While both the perspectives are different, developmental and strategic literature also looks at the intersection of diversified business groups having a pyramidal structure of ownership which may be under family control. This is one of the dominant types of business groups that exist today, and hence will be explored in further detail. The two approaches also recognize that the existence of business groups is a reaction to market imperfections that ultimately results in the sub-optimal allocation of resources.

3.1 Business Groups and Alternative Structures

The alternative to business groups isn't necessarily stand-alone firms. Groups of firms or businesses that share some relation to each other are common. Individual lines of businesses or products are often legally separate entities. Sometimes, different kinds of activity are housed within the same entity, only to be separated or sold at some appropriate time. Examples could be GE, Johnson and Johnson and the Mitsubishi group.

For diversified business groups with unrelated products, alternative models would be mainly multidivisional enterprises, conglomerate enterprises and holding company organizations. For pyramidal business groups, the alternative is horizontal business groups where the shares of listed companies are directly held by controlling owners and not through a subsidiary. Diversified business groups may have ownership structures that are pyramidal or horizontal. We briefly describe the main alternatives to diversified business groups below. Diversified business groups and comparable structures fall under multi-unit enterprises which consist of a headquarters unit and operating units where division of labor occurs according to administrative control and actual production of goods and services (Chandler, 1977). Allocation of resources and monitoring the performance of legally independent operating units under subsidiaries and affiliates is carried out by the headquarters unit of business groups.

Multidivisional enterprises – Large enterprises in mature economies exhibit this type of structure which has related product categories. Operating units are internal divisions or rather they are quasi-autonomous, self-contained divisions (Chandler, 1962). Internal divisions can also be legally independent subsidiaries but are administered within the enterprise i.e., they are under the strategic control of the headquarters' unit which helps in capturing and utilizing positive spill over effects in terms of knowledge and other benefits for common product categories.

Conglomerate enterprises – Another significant type of multi-unit enterprise that resembles business groups are conglomerate enterprises in which product profiles are not as closely related thus leading to limited spill over effects (Williamson, 1985). As a result, their internal control mechanism is less extensive. They may contain either internal divisions or fully owned subsidiaries in multiple product categories which may be related or unrelated. Originally the term 'conglomerate' refers to a company that diversified quickly through mergers and acquisitions in unrelated products. To separate conglomerates from diversified groups, there are four aspects that need to be kept in mind: ownership of head unit, top management, public trading status of operating unit and the administrative apparatus. While diversified groups are mostly controlled by families, conglomerates are not confined to families but can be publicly held corporations. Salaried professionals in top management carry out the critical decision-making for conglomerates, but for diversified groups the main decision-making body is almost always the family. Conglomerates own operating units as fully owned subsidiaries, while shares are listed and publicly traded for the operating units of diversified business groups which allows for the possible tunnelling of profit. While conglomerates may retain administrative control by the head unit only in terms of budget (financing and investment), diversified groups retain administrative control by the head unit in terms of both strategic and some financial control.

Holding company organizations – According to Williamson (1975), holding companies have loose divisions in which there is limited and unsystematic control between the headquarters unit and the operational units. They have a narrow range of related products. They are similar to business groups in terms of being in a position of control by virtue of its ownership of securities in other companies. The rationale may be to pyramid the voting control in order to milk the operating companies as seen in the pyramidal structure of business groups.

Thus, the main difference between business groups and other forms of organization is in the degree of control and the amount of diversification. Business groups have relatively tight control often with members of the family heading subsidiaries and are more diversified. Multidivisional enterprises exhibit the most control and the least amount of diversification. At the other extreme are holding companies that exhibit the least control but are more diversified. All the alternatives to business groups rely on professional managers rather than on members of the family for executive decisions.

3.2 Business Groups in Late and Early Industrializing Nations

In the twentieth century, as economies were going through a structural transformation into modern industrial economies, business groups played a significant role. Most of the main economic players in emerging economies are business groups that are family owned as well as government owned. Of the family-controlled groups, most are diversified businesses while in the government-controlled groups, most are in petroleum related businesses or financial services. Business groups in emerging economies usually consist of legally independent companies and, the majority of them have two or more listed subsidiaries with a headquarters unit organized as a holding company.

From as early as the nineteenth century, family owned business groups with diversified product portfolios and pyramidal ownership operated in the form of mercantile businesses such as the British overseas merchants, or in other business activities related to trading, manufacturing, distribution and financial services, e.g., the sixteenth century Fugger family of Augsburg with subsidiaries throughout Europe. Thus, the international trading concerns which formed the embryonic stage of modern industrialization and internationalization paved the way for large enterprises to make their way into the modern global economy. These overseas trading companies came about as a result of inter-country market imperfections which prompted them to explore overseas markets. However, if inter-regional and inter-economy market imperfections relating to product, labor and capital markets are the reasons for diversification, we would have seen more diversification for today's multinationals across countries. Evidence suggests that multinational corporations usually stick to their home country's products when expanding in emerging markets.

Historically, diversified business groups existed within continental Europe and matured industrial economies and were not just confined to those engaged in international trade. They were mostly family owned groups, but mega-banks also functioned as apex organizations that controlled operating companies across diverse businesses. Some of these bank-led groups were hierarchy type groups while others were involved only in financing relationships while keeping themselves away from strategic/budgetary decisions. However, even if business groups were operating historically in mature economies, collectively they remained secondary players to various small and medium enterprises, or large enterprises with technologically related diversification.

The evolution of business groups in early and late industrializing economies shows some dissimilarity. In the early industrialized economies, the development of the large enterprise sector experienced two waves. Initially, in the first phase, business groups exhibited a diversified product portfolio. As the economy matured, during the second phase large enterprises having related product portfolios came into existence. By contrast, in economies like Japan that experienced late industrialization, business groups that started in the early phases of industrial development collectively remained leading business organizations up to the twenty first century. The puzzle as to why diversified business groups failed to sustain their dominance in mature economies such as that of North America and Europe, even in the presence of market imperfections, remains to be explained.

One of the reasons could be the contrasting nature of internal capabilities possessed by business groups during the early industrialization and the late industrialization phases. As diversified business groups in early industrializing nations faced tough competition from large enterprises with technologically related and multidivisional models, which became the mainstay of the economy, they retreated. Most such groups could not establish product specific competitive assets or those which could transcend products/industries. Business groups in mature economies could manage to survive only after strategic reorientation and re-concentration of their portfolios into product specific competitive capabilities and specialized businesses. On the other hand, business groups in today's emerging markets have established themselves well in dealing with the competitive pressures of the twenty-first century business environment. It is the kind of ownership that is responsible for accumulating competitive assets related to intangible resources like administrative, financial or product-specific capabilities.

By the late nineteenth century pyramidal business groups were also functioning in countries like the United States, Canada, and Europe. The evolution of such groups mostly depended on individual economies and specific institutional conditions. For example, in Germany the pyramidal structure became popular after the second World War due to dual class shares being banned. In the US, pyramidal structures were prominent before the New Deal regulations were brought in during the 1930s. In other words, it is not just the degree of market imperfections in relation to the level of economic development but also institutional forces that are independent of market forces that influence the formation of pyramidal business structures.

Moreover, the formation of pyramidal structures in the US may not always have been motivated with the intent of tunnelling profits, and the pyramid form gained prominence only after 1888 when laws were passed allowing corporations to hold securities in other corporations. Also, by the late nineteenth century, the US market was already a mature market. Therefore, pyramidal ownership structure in the US was not a substitute for market imperfections at the institution level as such but probably, the conduct of some businessmen to create monopolistic entities to distort competitive pricing.

3.3 Factors Leading to the Creation of Business Groups

3.3.1 Diversified Business Groups

a) Exogenous Factors

There are mainly two demand driven factors which facilitate the formation of business groups into diversified product categories. The first is that of unfulfilled demand due to the lack of functioning markets possibly due to underdevelopment. An example could be the lack of high-end products in rural markets. The size of the market may be too small and risky for an individual firm to enter and serve. A business group with a diversified portfolio may be able to pool risks better to serve the market. The second arises from government policy. Often developing countries, such as India, have tried to pursue import substitution as a developmental strategy. It was felt that import of consumer goods led to wastage of precious foreign exchange which could be better utilized for the import of capital goods. Consequently, imports of foreign consumer goods were either banned or had to pay very high tariffs. As a result, there was a sudden demand for domestic consumer goods, which were often met by domestic producers who had no expertise in these sectors. This was sometimes accompanied by incentives, a supply side push, from the government to produce certain goods which were deemed to be useful to the economy, such as fertilizers. It is no surprise that manufacturers produced these goods regardless of their focus.

- Imperfect markets

One important strand of literature emphasizes market failure and imperfections as the cause behind the emergence of business groups. It is felt that institutions and regulatory mechanisms are weak in developing economies, which result in high transaction costs. Business groups are seen as a means to reduce these.

Product markets may not function well in spite of their being sufficient demand if there is an absence of suppliers who can be trusted to provide good quality products. Inadequacy of information along with weak contract enforcement may prompt business groups to diversify into different unrelated categories, creating an umbrella brand. Diversified groups can also act as a substitute for imperfect capital markets by creating channels for internal capital transfer within the group to invest in new businesses, when investors are unwilling to invest in markets with poor protective measures. This may help mitigate risk if the business group has a well-established reputation. Business groups are also a response to labour market imperfections that arise due to a lack of qualified employees in emerging economies. Business groups can establish their own training facilities, or rotate personnel to create their own internal labour market which make them more efficient compared to the external market.

- Role of the government

The second critical factor that facilitates the formation of business groups is government aid. In this argument, the government supports particular industries and promotes industrialization. The government provides them with the necessary funds, charges lower interest, provides subsidies and protects the domestic market. Once the government moves on to more advanced industries, businesses collaborating with the government may upgrade their capabilities and diversify (Studwell 2014). However, government favours may lead to irregularities in the market relating to crony capitalism and rent seeking.

b) Endogenous Factors

Endogenous factors look at the internal competitiveness and capabilities of diversified groups. Normally, firms with access to new technology (whether developed internally or sourced from outside) should be able to purchase or develop these abilities and introduce new products in the market. However, in many developing markets, access to new technology is unavailable. Business groups with access to foreign firms or with the government, may be better able to develop these technologies. It is easier for business groups to enter into joint ventures or other technology transfer contracts.

This paves the way for profit opportunities for business groups in emerging markets through project management and start-up capabilities. Business groups, therefore, diversify into different categories which may be related or unrelated. As new plants start functioning, the accumulated project management capabilities act as competitive assets which prompt business groups to explore new industries. As the market matures, businesses would tend to specialize in core domains and technologically related areas. However, on the whole they remain diversified due to what some have termed as ‘trans-product’ capabilities resulting in shareable knowledge across product related categories giving them a sustainable advantage even in competitive markets.

3.3.2 Pyramidal Business Groups

Pyramidal business groups exist because of the controlling interest that comes with limited capital investment via pyramiding that allows for the tunnelling of profits. Separating the cash flow rights from control rights comes at the cost of minority shareholders. However, in developing economies, where investor protection and contract enforcement are weak, minority shareholders may not be directly affected if general shareholders accept the probability of profit diversion and share prices are discounted. Another reason for the development of pyramidal business groups was because profitable groups could subsidize unprofitable or nascent units for the group’s collective prosperity. Even when markets mature, pyramidal structures endure because of invisible assets like group reputation or political connections. Also, there may be certain advantages relating to taxes and subsidies when state-owned enterprises are privatized. Hence, pyramidal group structures may remain even if there are societal costs such as transfer of profits from minority shareholders, the underdevelopment of capital markets and the concentration of economic power in the hands of a few wealthy families.

3.4 The Evolution of Business Groups

One might conclude that business groups should eventually die out as they have done in the mature economies in America (Canada and USA) and in Europe. To be sure there are some old-style business groups that still function but usually their numbers are small and their role in the economy is not significant. Japan could also be cited as an example where business groups have withered away. However, they are still going strong in countries such as Korea and Thailand. One may say that given sufficient time and market style reforms that business groups must eventually disappear. That may be so, but how long will that take and to what extent should markets be liberalized? Most economies, some more than others, suffer from some amount of market imperfections and should therefore remain a happy hunting ground for business groups.

Also, non-market forces such as politics and legal institutions have played their part in determining the laws and regulation of capital markets. As long as these factors are present, pyramidal business groups will exist within the institutional framework of the relevant economies, even if there are long run shifts towards a competitive market structure. Pyramidal ownership structures may also survive because controlling shareholders may have other incentives than tunnelling profits such as control of economic wealth that is larger than the actual holdings they have in order to leverage the economic gains from favourable business transactions. They might also want to hold on to non-economic benefits like political power and social prestige which comes from adopting a pyramidal structure. Maintaining a pyramidal structure can also lower market risks by controlling shareholders, for innovative new products, by holding operating units legally independent and isolating the risk.

Business groups especially those that are family owned with a diversified portfolio have been searching for an effective organization model as they deal with market developments. On the one hand they are faced with increasing domestic and foreign competition and on the other they are entering complex industries such as information technology and financial services. Their problems are compounded by the amount and complexity of information that the executives at the headquarters and the members of the family have to deal with. According to Chandler, this “overload in the decision making at the top” was the reason behind the advent of the multidivisional structure of modern corporations.

The reason behind their entry into complex industries is that these are industries that afford the most opportunities for growth and profits. It is usually difficult to generate high profits from mature industries with many competitors. However, this poses strains on the capacity of the higher management. One possibility would be to relinquish control to professional managers. A second problem relates to retention of capabilities that make the business group profitable in the first place. The entry into new businesses reduces the shared knowledge and coordination that is necessary. One solution is to arrange related products into strategic business units so that these can share information and coordination. The owners then can act more like portfolio managers, choosing which businesses to be in and the extent of their investment. Of course, this raises the problem of inter business unit sharing of knowledge and information, but maybe, this is the best that can be achieved.

4 Japanese Business Groups

Japanese business groups are an enigma. They started off as standard business groups: family controlled, diversified with pyramidal structures. However, possibly because of Japan's post second world war history they morphed into structures known as keiretsu. By most accounts they were active from the 1950s till the 2000s. After that they slowly disappeared and according to scholars are now non-existent. However, the names of some of the business groups such as Mitsubishi still exist and are more like multidivisional firms. One may wonder why we wish to devote space to a phenomenon that does not exist. First, it should be granted that the keiretsu structure was unique and worthy of study in its own right. Second, it can be thought of as an intermediate stage between a traditional business group and a modern multidivisional firm or conglomerate. It is possible that traditional business groups in developing countries may form similar structures once buffeted by the winds of change. Finally, the nature of interaction between Japanese firms and Indian firms (business groups or otherwise) are yet to be seen. As Japanese firms enter into India will the experience of countries like Malaysia and Thailand going to be repeated? Will some form of the Keiretsu be resurrected or maybe nothing in particular is going to happen? Witt (2014), Taniuchi (2014), Aoli and Lennerfors (2013), Matous and Yasuyuki (2015), Flath (2014), Dow, McGuire and Yoshikawa (2009) provide discussions on the nature of Japanese business houses.

Keiretsu structures fall between hierarchical structures and market-oriented structures. They are corporate groupings of Japanese firms where individual firms maintain their operational autonomy, but coordinate with other firms in terms of strategy and the exchange of assets and resources. They also exhibit cross shareholding patterns. There are two types of keiretsu. Horizontal keiretsu encompass a wide range of diversified businesses centred on a dominant bank or trading company. Vertical manufacturing keiretsu are firms that are organized around particular industry value-chains. They are the flagship firms in the chain, set within a cooperative pyramidal structure, having upstream connections with suppliers and downstream connections with retailers and distributors. The core companies maintain joint investments, strategic alliances and cooperative R&D through the exchange of personnel and information from senior management to junior. Apart from this there are the distribution keiretsu which consist of the retail network of large manufacturers.

Keiretsu structures have both positive and negative effects on market efficiency and the ease of doing business. While for Japanese firms there are enhanced synergies from trust-based interactions, foreign firms have complained of experiencing barriers to entry as a result. However, such structures have also been charged with inertia when faced with low economic growth and are partly held to be responsible for Japan's lost decades. The zaibatsu is the pre-war progenitor of the keiretsu which had a hierarchical structure, family control and state linkage. With their break-up by the US occupation, they were transformed into different entities similar to network forms of organization. The keiretsu form of organization was significant in Japan from the 1950s to the early 2000s.

4.1 Origins of the Keiretsu

The keiretsu evolved from the zaibatsu which were industrially diversified business entities having multiple layers and coordinated from the top by a family or a holding company. Like the business groups of the developing world, a small number of families acquired control over a large portion of the Japanese economy through chains of cascading equity ties within a pyramidal structure. For example, the Mitsubishi zaibatsu which started as a single integrated corporation was transformed into a business group with a pyramidal structure when it started turning internal divisions of shipping, mining and trading company into separate legal entities. By the end of the second world war the big three zaibatsu, Mitsubishi, Mitsui and Sumitomo were said to account for 35 percent of the total corporate capital in Japan. After the war, the stocks of the zaibatsu were redistributed, and a number of companies fell prey to hostile takeovers. In defence, some of the former zaibatsu created a web of cross-shareholdings amongst themselves which ensured that the group held the majority share of stocks of an affiliated firm. This prevented takeover by other firms and linked together by cross-shareholding, executive transfers, preferential trading and regular meetings of chief executives in *shacho-kai* or the presidents' councils, the big three zaibatsu were resurrected as keiretsu.

Three more groups, Fuyo, Sanwa and DKB Sankin, joined Mitsubishi, Mitsui and Sumitomo in the 1960s and 1970s. These formed around the three banks, Fuji, Dai-Ichi and Sanwa and were more loosely structured. These six formed the top six horizontal keiretsu. The structures of keiretsu were not formalized and there was no hierarchy among them. The coordination largely centred around the main bank, which belonged to the keiretsu. The *shacho-kai* or presidents' council provided met in ostensibly social gatherings but are suspected to have shared information and provided mutual assistance. In fact, it is difficult to determine which firms belonged to which keiretsu and some seemed to belong to more than one. However, a reasonably reliable indicator was membership in the council. Thus, keiretsu can be thought of as loose alliances of reasonably independent firms. New firms could also be drawn into their orbit through trading or lending relations. So, the structures also changed with time and were more fluid than is usually suggested.

The second major form of the keiretsu was the vertical form. It comprised of manufacturing groups: suppliers and subcontractors organized across a vertical division of labour around a large industrial firm. There is no counterpart to the *shacho-kai* in a vertical keiretsu but there is a loose association of suppliers maintained by manufacturers which are co-operative in nature. However due to the vertical structure, personnel from the vertical keiretsu have greater cohesion which enables better co-ordination between suppliers and consumers. They also have improved personnel flows through exchange of engineers and other trained executives, and the transfer of executives from higher to lower-tier firms which prevents their redundancy and ensures the adherence to lifetime employment norms. Because of the support displayed between upstream and downstream firms in a vertical keiretsu there is risk sharing with each party supporting the other and absorbing some of the cost and risk.

It may be assumed that horizontal and vertical keiretsu are distinct business structures. However, that is not the case and horizontal keiretsu may have vertical keiretsu within them. Furthermore, the vertical keiretsu may have firms that belong to the orbit of several horizontal keiretsu. For example, the Toyota group is a vertical keiretsu aligned with the Mitsui horizontal keiretsu. However, Daihatsu, which belongs to the Toyota vertical keiretsu belonged to the Sanwa horizontal keiretsu.

Identifying which firms belong to which keiretsu, under the circumstances, is a difficult task, not that it has stopped scholars from trying. However, to some extent all such attempts are arbitrary. One way to identify firms within a group is to use a network clustering algorithm using data on trade, lending, equity and direct transfer ties. This was done by Lincoln and Gerlach (2004) by taking many of the largest financials and trading companies in the Japanese economy during the period 1978-1998. The keiretsu can be observed as blocks or clusters of firms that occupy structurally equivalent positions in the network. However, every three years from 1978 to 1998, distinct keiretsu clusters are seen. Earlier clusters show more clearly and in each succeeding period the empirically derived groups were fuzzier. By the 1990s, large-firm networks don't show up that clearly and point to the demise of the keiretsu. However, that does not necessarily indicate that ties between clusters do not exist. It may be that the clusters have changed shape and may now be geographical or industry based. It may be worthwhile to use the existent data and analyse them according to the advances made in network economics.

Apart from their evolution from the pre-war zaibatsu, there were a range of forces that drew the firms into tighter relationships. Equally, there were forces which tended to push them apart. Banking relations, equity ties and sharing of personnel drew them together. Sometimes geographical proximity or the use of bailouts had the same effect. On the other hand, many keiretsu also expanded by setting up divisions with new products that were separate companies under the support and control of a parent firm. This was different from the kind of autonomy that their counterparts in mature economies enjoyed. Due to the strong culture and tight organization of Japanese enterprises, the keiretsu satellite created a substitute quasi-intrapreneurial business environment.

Keiretsu like business groups in emerging economies pursued strategies of unrelated diversification. There were however differences between horizontal and vertical keiretsu. Horizontal keiretsu usually contained at least one firm from the major industrial sectors. In the vertical keiretsu, upstream suppliers or downstream distributors to a large manufacturer often diversified and expanded into other arenas. For e.g. Toyota started off as an assembler of sedans but expanded its product line to include trucks, minicars through its keiretsu partnerships with Hino and Daihatsu, respectively.

4.2 Impact of Keiretsu

The keiretsu structure can be evaluated in terms of their overall impact on the development of the post war Japan economy. This can be done through the lens of development economics or through other sub disciplines in economics. Quite often scholars from other areas such as strategy and finance have also waded in.

The received view is that the keiretsu structure helped to overcome market imperfections and institutional deficiencies. First, it helped firms get access to funds for the purpose of investment when Japanese capital markets were not serving the purpose. Secondly, given the deficiencies of the Japanese distribution systems the keiretsu system allowed firms to bypass these provided coordination and economies of scale. Third, the system allowed firms to set up upstream and downstream firms for the inputs and distribution, at a time where supply chains were virtually non-existent. Finally, it also allowed entrepreneurs within the firms to innovate and come out with new products, which went on to become successful firms on their own. This was an important role at a time when venture capital was largely absent.

There is a considerable amount of disagreement about the microeconomic effects of Keiretsu, ranging from significant to no effect. The arrangements for information sharing and cooperation would raise the suspicion of antitrust economists, who could sniff cartelization as well as abuse of dominance. If that was the case the financial performance of Keiretsu companies would be better than non-keiretsu firms: but that was not the case. The Keiretsu structures could also be viewed as economizing on transaction and agency costs, but that also should be reflected in superior performance. According to some, all that Keiretsu system does is risk sharing and resource shifting among affiliated firms. For example, in the 1970s, Sumitomo Bank rescued the Mazda Motors through bank loans, arranging for lower input prices, sending managers and other actions. There is a fair amount of evidence that affiliates in distress have received significant help from their Keiretsu partners which led to the restoration of their fortunes. Yet when it comes to the economic viability of the groups, this could happen at the expense of their high performing counterparts. Thus, the Keiretsu system could be viewed as a set of transfer payments from the better performing firms to the poorer performing ones. This might have helped stave off bankruptcies and maintain the system of lifetime employment and no layoffs, but it didn't provide good returns to the investor.

For the vertical keiretsu, the close and collaborative buyer-supplier relationships prevalent in vertical structures lead to efficiency and innovation as documented by numerous studies. More than the horizontal keiretsu, the vertical version seems to perform an economically important function. The high degree of trust, information sharing, efficient governance due to relationship specific investments along with relatively customized processes make businesses more likely to choose keiretsu suppliers than independent suppliers when the complexity and specificity of the parts sourced is high. Similar to the horizontal keiretsu, vertical keiretsu have also been able to share and pool risk. For example, a study finds that suppliers to Japanese auto assemblers are more protected from the risk of demand fluctuations, which the car companies have to deal with.

4.3 Keiretsu: The End?

By the 1980s the breakdown of the keiretsu structure was evident. An examination of specific ties like equity ties document the unravelling of the keiretsu. Major banks and insurance companies sold off their cross shareholding and replaced them with foreign institutional shareholders. During the 1990s, keiretsu risk sharing activity declined further and Japanese firms like the Japanese electronics businesses began aligning themselves less with keiretsu firms and started forming strategic alliances with other domestic firms instead, especially in areas such as research and development. The keiretsu structure gave way to holding companies and conglomerates. The result can be seen in Table 4.1. The old and venerable Mitsubishi, Mitsui and Sumitomo are still there but the extent of intra group links are unclear. Some of the old keiretsus have like Fuyo and Daiichi Kangyo have dissolved following restructuring. The number of banks have reduced and are no longer, ostensibly, tied to the keiretsus. This has resulted in the emergence of MUFJ, Mizuho, Nomura and SMBC. Companies like Toyota and Matsushita, which were part of vertical keiretsus, still remain. A slew of new firms such as Rakuten, Uniqlo and Softbank have emerged. So the business landscape of Japan now exhibits considerable variety. The following are the main reasons for the decline: banking consolidation, change in accounting rules, corporate governance reform, technological change and lack of cultural and political legitimacy.

They are discussed below:

1. **Banking consolidation:** A wave of Japanese bank consolidations during the end of the 1990s brought lasting changes to the financial services landscape. This in turn altered the structure of Japanese banking and their linkage with the horizontal groups. These mergers were large in scale and reduced the number of banks that were supporting the keiretsu. Apart from banks, industrial mergers also took place beyond the keiretsu association. A parallel consolidation of non-keiretsu industrial partners led to the formation of alliances related to distribution and maintenance.
2. **Change in accounting rules:** To increase the transparency of Japanese firms, financial reports were required to include the results of all affiliates however small the stake in the affiliate. The tunnelling of profits ascribed to business groups was possible under old accounting rules which allowed companies to hide assets and liabilities of associated firms. The new accounting rules prohibited keiretsu practices like transferring personnel to affiliates or bailouts. A major rule that led to the unravelling of the keiretsu structure was the reporting of assets at market value rather than book value. Many banks were discovered to be worse off and insufficiently capitalized to support their lending activities. Thus, banks had to offload their cross-held shares.
3. **Corporate governance reform:** Regulatory changes were made relating to the composition of board of directors and reducing the size of the board for speedy decision making. While large boards played an important role in the keiretsu system of executive exchanges and inter-twined directorates, smaller boards and tighter rules on director participation made firms less likely to indulge in the keiretsu practice of seconding bank and trading partners to be directors and executives of affiliated firms. The option of using an independent auditor in line with the US system was also given to oversee corporate finance. The interests of shareholders and management were brought into better alignment with the removal of legal restrictions on stock options.
4. **Technological change:** The competitive advantage that was enjoyed by the keiretsu style management structure faded during the 1990s. Modular manufacturing which requires less integration and customization of production stages (Sturgeon 2005) was adopted by most firms. Standardized parts used in multiple models and assemblies sourced from fewer and larger suppliers helped lower costs. Online procurement systems enabled companies to automate some of the processes that were earlier being maintained through close supplier-customer ties within the keiretsu. The global adherence to the Japanese lean production system adopted by Japan's competitors afforded less competitive advantage to Japanese manufacturers and eventually led to the decline of the vertical keiretsu. Japanese manufacturers also moved production abroad and established new ties with foreign suppliers while breaking old keiretsu ties as a result of exchange rate fluctuations, and labour or transport costs.
5. **Lack of legitimacy:** The general political and cultural disregard for the keiretsu system quickened pace in the 1990s after firms found themselves rewarded in the stock market under the new rules and initiatives that refused to bail out struggling affiliates or recognize subsidies as such, instead of as operating expenses.

During the 2000s, press reports noted the possible revival of the keiretsu structure as some Japanese firms sought to regain control of suppliers from foreign ownership through vertical cross-shareholding of equity stakes. But a closer look revealed that this was not the case. Instead companies hiked stakes in closely affiliated firms and converted them into formal subsidiaries and internal divisions through acquisitions. Although Japan retains some distinctive feature of the keiretsu structure, today its corporate structure and management resemble the Anglo-American West through greater internalization and more arms-length market-like relations.

Table 1 - Current Japanese Conglomerates

Group Name	Sectors	Market Cap (JPY)
Mitsubishi	Mining, shipbuilding, telecom, financial services	3.80 trillion (Mitsubishi corp.)
Mitsui	Financial services, real estate, retailing, logistics	3.28 trillion (Mitsui & Co ltd.)
Sumitomo	Automobile, electronics, IT services, real estate	1.69 trillion (Sumitomo corp.)
Toyota	Automobile	25.42 trillion
KDDI	Education, Analytics, Asset Management	7.06 trillion
Nomura	Banking, securities, asset management	1.76 trillion
NTT	Communications, IT Services, technology	10.29 trillion
Nidec	Technology	7.70 trillion
Shin Etsu	Chemicals	7.45 trillion
MUFJ	Banking, securities, asset management	6.16 trillion
Mizuho	Banking, securities, asset management	3.31 trillion
SMFG	Banking, securities, asset management	4.33 trillion
SONY	Electronics, Movies, Music	12.55 trillion
SoftBank	Mobile services, Investment	16.07 trillion
Seven Eleven	Retailing, investment services	3.24 trillion
Fast Retailing	Apparel (Uniqlo, GU, Theory etc.)	9.16 trillion
Sompo	Insurance, securities	1.54 trillion
Marubeni	Trading (Consumer, Chemicals, Transportation etc)	1.18 trillion
JR	Railways	7.42 trillion
Matsushita	Manufacturing	2.88 trillion
Japan Post	Postal, banking, insurance	3.56 trillion
Canon	Electronics	2.71 trillion
Subaru	Automobile	1.58 trillion
Bridgestone	Motor Vehicle Tires	2.46 trillion
Hankyu Hanshin	Transportation, Real Estate, Entertainment, Travel	837.86 billion
Furukawa	Metals, machinery, chemicals, electronics	195.32 billion
Benesse	Education, Childcare	206.01 billion
Kinetsu	Transportation, Real Estate, Retail, Hotel and Leisure	831.29 billion
Koei Tecmo	Game development	793.71 billion
Daiwa	Banking, asset management	787.15 billion
Sanwa	Manufacturing, building interiors	279.05 billion
Dowa	Materials, Metals, Environment	233.70 billion

Source: Author's calculations based on Google search results

5 Business Groups in India

We will now discuss Indian business groups. A representative sample of Indian business groups is shown in table 5.1. The top of the table is headed by the Tatas and Mukesh Ambani of Reliance. The sizes of these groups fluctuate as per business conditions but they usually hold on to the top positions. Anil Ambani, brother of Mukesh Ambani, has seen a drastic reduction in his fortunes. As in Japan financial institutions are featured prominently, but there is an absence of manufacturing, with the exception of automotive. Information technology has a strong presence. Our discussion of Indian business groups will be largely based on Sarkar (2010).

Table 2 - Indian Business Groups

Group Name	Sectors	Market cap (INR)
Tata	Automobiles, IT services, steel and others	10.15 trillion
Mukesh Ambani	Petrochemicals, retail, telecommunications, others	15 trillion
Birla A V	Aluminium, textiles, cement, telecommunications	3.6 trillion
Anil Ambani	Infrastructure, power, entertainment, others	62 billion
Vedanta	Resources	594 billion
Bharati	Telecommunications, entertainment	2.84 trillion
L & T	Construction, engineering, power	1.79 trillion
Adani	Power, infrastructure, solar and others	541 billion
HDFC	Banking, financial markets	7.84 trillion
Mahindra	Automotive, IT, Aerospace, Aftermarket, others	842.44 billion
ICICI	Banking, financial markets	3.6 trillion
O P Jindal	Steel, Polyfilms and others	273 billion
JSW Group	Steel, energy, cement, infrastructure and others	918.4 billion
Jaypee Group	Engineering, construction, cement, power, others	16.47 billion
Infosys	Information Technology	5.28 trillion
Wipro	Information technology, consumer goods, others	2.20 trillion
DLF	Real estate	573 billion
Axis Bank	Banking, financial markets	1.91 trillion
GMR	Airports, energy, infrastructure, others	155.42 billion
Rahul Bajaj	Two wheelers, electricals, finance, others	996 billion

Source: Rediff.com and author's calculations based on Google search results

The first Indian family owned business groups can be discovered in the second half of the nineteenth century. Before this, commerce and manufacturing were largely the domain of European business houses. Indian participation was restricted to petty trading activities and money lending which depended on caste and location. The success of European businesses drew the attention of Indians who sought to emulate them through individual effort and entrepreneurship. The first business group in India, the Tata group, started in textiles, soon to be followed by the Khataus, Birlas and Mafatlals. The original formation of Indian business groups owed much to entrepreneurial enthusiasm, the example of successful European business activities and the formation of a large single market through British rule.

The evolution of group structure was aided by the role that family finance played in promoting new ventures for Indian entrepreneurs. An underdeveloped stock market and banking system, under the control of the British, who were loath to help Indians were the reason behind this development. Consequently, these enterprises became joint stock companies with shares owned by family members and friends and acquaintances. The profits from the original companies were reinvested into other new concerns, partly because the size of the market was small and there were many opportunities in a developing economy. Thus, group of companies formed that were associated with a particular family and there were a number of such business groups. Some of these groups developed a pyramidal structure.

Each group also had a managing agency, as a proprietorship or partnership comprising family members that was entrusted with managerial responsibilities. Not only did this help with vertical and horizontal integration which generated scale economies, but it also helped address the problems of a deficient managerial market in the early years of industrialization. Further, all this could be achieved without market-based transactions, which would have been the norm if the members of the business groups had been independent companies.

These family-based business groups benefitted from the extremely strong ties of trust and reciprocity that exist within the Indian joint family structure and also within certain communities. This characteristic conforms to the sociological perspective on the formation of business groups which accentuate the network effect. They were also diversified structures that were legally independent under common family administered control and as such were full-fledged economic entities which pursued economic goals. Such groups were also seen as an institutional response to weak institutions and missing markets and helped develop both the firm and the market. Thus, they adhered to all the standard criteria associated with business groups in many of these key aspects. During this period, the revenues generated, and experience gained helped in the sustenance of internal capital as well as the development of the labour market, which in turn enabled groups to overcome market imperfections and generate further growth for the economy. Indian family groups proliferated and their share in capital employed went from 13 percent to 34 percent in the 1918-39 period with three of the top four groups being owned by Indians. As such, the business groups, though much maligned in later years and probably even now, were instrumental in the development process of India.

5.1 Regulation and Deregulation (1947-2006)

The institutional environment in the case of business groups for the years 1947 to 2006 can be broken up into 3 distinct periods: the time taken from their inception in the late nineteenth century to 1947, the post-independence period up to 1991 when the environment was extensively regulated and subsequently the period of liberalization and globalization that was ushered in for the Indian economy post 1991. The economic development of India under colonial rule has been extensively discussed. On the one hand industry benefitted from being a part of the globalized British empire and planted roots in foreign countries, but overall the policies of the British were not geared towards the economic development of India and India performed dismally in terms of traditional measures of economy as increase in GDP per capita.

After independence in 1947 the state adopted a protectionist attitude and contrived to control the “commanding heights of the economy.” The regulated industry policy entrusted a dominant role to the public sector and a residual role to the private sector. The policy of import substitution along with industrial/import licensing, infant industry protection and regulations to curb the concentration of economic power ensured that domestic industrial capabilities could not be effectively built up under protected markets. The private sector tried to cope as best it could under very challenging circumstances. Restrictions on expansion in core businesses led to an increase in the portfolio of businesses for business group. Expand where you can get a license was the motto. The protectionist and import substitution policies of the government spawned the growth of many firms. The eviction of Coca Cola saw Indian substitutes emerge such as Thums Up and Campa Cola. The retreat of IBM led to the emergence of personal computer manufacturers such as HCL and Wipro.

With mounting evidence on the ineffectiveness of the licensing regime to achieve economic growth or to offer social justice (as the ostensible reason for regulation), attempts were first made to liberalize the economy during the 1980s, which failed. The Indian economy which had begun to slow down faced a foreign-exchange crisis in 1991 which led to structural reforms in its industrial and trade policy regime. The abolition of licensing and removal of curbs placed on large businesses eventually made business houses able to expand, invest and diversify post 1991. Reducing trade barriers, deregulating the banking sector, allowing free pricing of primary issues and transparency in the stock market, permitting foreign institutional investors to provide low cost finance were other measures that were initiated.

5.2 Indian Business Groups: Some Distinctive Features

Business groups in India are characterized by family ownership, diversified portfolios and pyramidal structures as per the standard definition of business groups. Ownership is through equity as well as through administrative control. Perhaps the standout feature of Indian business groups is the importance of family, ethnicity or community.

There were 2922 firms affiliated with 560 business groups as identified from the Prowess database in 2006. Group affiliates together account for almost 70 percent of asset share in 2006. The concentration of business groups though meant that only a few large groups (around 4) would account for most of the share of business assets. This persisted in spite of the development of the market. There was some turnover of rankings prior to 2000 among the top twenty with 11 new entrants and 9 previous ones. However, ranks have not changed much since then and there not much change in the distribution, so that by 2006, six of the groups belonged to the pre-independence period (the oldest being Tata), nine belonged to the regulated period of the 1950-70s, and the remaining belonged to the post liberalization period.

Family ownership has been through holding company structures, either in the form of a single holding company like the Tata group or multiple ones like the Anil Dhirubhai Ambani group. Sometimes there is no holding company but a flagship company at the helm around which has subsidiaries, private companies and trusts where family members have stakes. These are often organized as pyramids but also have intra group shareholdings, making the structure very complicated. While the owner or promoter of the group has absolute control, it can also exert informal control over affiliates lower in the pyramid with only minor equity stakes. In the period 2001-06, the direct stake of promoters was 41 percent whereas indirect ownership amounted to 5.35 percent. However, direct ownership by family members was relatively low. The family influence was indirect, either through closely held group holding companies (Tata Steel and Reliance Communications) or through other privately-owned companies (Reliance Industries and Hindalco Industries) owned by promoters. Tunnelling of earnings has been a consistent concern with Indian business groups. The extent of tunnelling is difficult to detect given the complex structures of these groups. In fact, it is difficult to even appropriately value these groups given incomplete knowledge of earnings and shareholdings.

Two features of group affiliates are promoters as directors, and multiple directorships. The percentage of companies in which the promoter serves as director or managing director is higher for group affiliates than non-affiliated companies while the percentage of directors with three or more directorships continues to remain high (56 percent against 6 percent in the US). Business groups have more insider directors with multiple directorships compared to ones which do not belong to business groups. This is also true for independent directors with multiple directorships. Managerial integration is also achieved via an inner circle among group affiliates from which most inside directors as well as independent directors emerge (often from a single group). This is in contrast to the inside or independent directors of non-affiliates where a larger share of directors from both categories are concentrated in non-affiliates themselves rather than affiliated group companies.

5.3 Dealing with the Business Environment

The first notable feature of Indian business groups is diversification. Though family-based business groups are by nature diversified, the scale of diversification in India is very high. However, this was driven more by environmental factors than deliberate strategy. During the colonial period lack of competitors and a large market coupled with business opportunities saw business groups expand into many unrelated areas. Even though, business groups differed in size and their portfolios they had similar strategies for expansion.

During the license regime raj business groups continued their march towards diversification, only their reasons were different. They were now faced with a government policy that looked at them with suspicion and stymied their efforts on expanding their businesses. Business groups developed considerable ingenuity in expanding regardless of such impediments. The primary weapon in the hands of the government were industrial licenses, that were required for any sort of production among licensed goods. Access to credit and foreign exchange and imports were also rationed. Once a particular firm within a business group reached its licensed production limit it had to diversify into other industries. They could not pick and choose but had to produce what they could get licenses for, though they could get licenses through their ability to work the system.

Economic liberalization and the subsequent deregulation and development of the external and internal markets raised questions about the relevance of unrelated diversification. Some felt that there would be a wave of mergers and acquisitions as business groups rationalized their businesses based on a coherent strategy. It should be mentioned that Indian markets, both external and internal are far from perfect, and if one were to search for market imperfection to justify the existence of business groups, many such examples can be found. Nevertheless, the process of liberalization and deregulation saw many firms streamline their businesses.

The strategic responses of Indian business groups during the post reform period varied. While some groups focused on core competencies, some diversified either extensively or in select product categories. For the period 1991 to 2006, the core industries of Indian groups (with the exception of one group) remained the same. While some chose to expand their core businesses (e.g. Reliance), others also pursued different lines of activity relative to their core industry (e.g. Tata).

Unrelated diversification has also been observed along vertical lines. Firms may be tempted to avoid transaction costs through vertical integration which in turn can also lead to diversification. For example, Reliance started in the 1960s with textiles and moved to in-house production of rayon because of the market failed to provide adequate quantity and quality. As a result, the company moved forward through vertical integration into retail and backward into petrochemicals and gas, and subsequently leveraged this experience to foray into unrelated industries like cement and telecommunications.

The post-reform period also witnessed the growing internationalization of group companies through outward direct foreign investment (ODFI). Even during the license raj regime Indian business groups ventured abroad given the problems they faced at home, even though the regulatory regime was far from conducive to such expansion. Initially they concentrated on manufacturing in developing economies: an environment that they were much more familiar with. Later they changed their focus to services and developed economies. The post liberalization period not only brought about market expansion through ODFI but also improved their global competitiveness and by creating value chains through backward and forward linkages to become competitive globally. Most of the global acquisitions were done through group affiliated companies. The forward linkages were focused on developing marketing and sales capabilities in developed economies to be served by low cost domestic operations.

5.4 How have they fared?

As far as performance is concerned, there is no significant difference in the performance of affiliated group companies compared to stand-alone firms. Groups did not outperform stand-alone firms and their profits moved in tandem. However, group affiliated companies were larger in terms of sales and assets, more leveraged and older, when compared to non-affiliated companies. Business group affiliated companies have expanded into information technology services, where Indian companies have demonstrated superior performance. They have also moved into financial services, telecommunications and retail. In these new markets they have not demonstrated better performances than stand-alone firms.

The experiences of business groups can be summed up by the old adage: the more things change the more they remain the same. Business groups have had to face challenging environments as they evolved in different institutional regimes. They have changed strategies, diversified and expanded along the way. There has been some turmoil, with changes in the fortunes of some. However, they have more than managed to hold their own. The disappearance of the business group in India is quite some distance away.

6 Japanese firms in India

According to the Japanese embassy the total number of Japanese companies registered in India stood at 1,454 at the end of October 2018 and the total number of Japanese business establishments stood at 5,022. The largest number of Japanese establishments are in Maharashtra (815), followed by Tamil Nadu (600) and Karnataka (534). Prominent Japanese involvement in India include Suzuki, Toyota, Uniqlo, Mitsubishi, Mitsui, Honda, Mizuho, Hitachi, Sony and Panasonic. Indian firms in Japan include Infosys, TCS, HCL technologies, OYO, SBI, Quick Heal and Sun Pharma.

The literature on the behaviour of Japanese firms in India is relatively sparse. Broad studies on economic relations and trade have been carried out by Sato (2012), Buckley, Cross and Horn (2012) and Taneja, Joshi, Bimal and Singh (2020). Similarly, Roy and Chanda (2020) look at trends in FDI inflows from Japan and Chanda and Tokas (2020) consider the effects of trade agreements. Some authors have compared and contrasted the behaviour of Japanese firms in India and China. A notable example is Anand and Delios (1996). For our purposes the more interesting papers are Horn and Cross (2016) which looks at Japanese production networks, Varma, Awasthy, Narain and Nayaar (2015) and Masanori (2012), who investigates Japanese company strategies in India. We will provide a brief discussion of Horn and Cross (2016) first.

Table shows the institutional characteristics of India and Japan, according to Witt and Redding (2014).

Table 3 - Institutional Characteristics of India and Japan

Category	Measure	India	Japan
Education and Skills	Adult Literacy	0.61	0.99
	Education Attainment Index (2010)	0.45	0.883
	Employment Tenure	short (private), long (state- owned)	long
	Skills Acquisition	private, some corporate	OJT
Employment Relations	Union Density	6.9% (2008)	18.5% (2010)
	Organization Principle	industry	company
	State Intervention in Wage Bargaining	low-medium	low
	Coordination	2	3
	Belligerence: Days Lost to Strikes, Average 2000– 2008	2,52,30,911	11,693
Financial System	Main Source of External Capital	banks	banks
	Allocation Criterion	relationships, state	market, relationships
	Term	long	long
Interfirm Relations	Presence of Business Groups	business houses	keiretsu
	Noteworthy Other Networks	caste or religion-based networks, industrial clusters (IT)	intra-industry loops with strong associations, R&D consortia, supplier and distribution networks
Internal Structure	Decision- making Structure	top-down	participatory
	Extent of Delegation	low	medium-high
	Main Basis of Promotion and Pay Raises	relationships, seniority	seniority
Ownership and Governance	Main Ownership Form, Large Firms	family, state	public
	Main Controlling Owner	family, state	firms
	Investor Protection Index (out of 10) (2012)	6	7
Social Capital	Interpersonal Trust	high	high
	Institutionalized Trust: Rule of Law	-0.06	1.31
State	Type	predatory with developmental trend	residual developmental, welfare elements
	Decision- making	top-down, variation at state level	participatory through associations and committees
	Voice and Accountability	0.42	1.05
	Government Effectiveness	-0.01	1.4
	Regulatory Quality	-0.39	0.98

Source: Witt and Redding (2014)

6.1 Location of Japanese Firms in India

Their study tries to answer the following research questions:

1. “How do subnational location characteristics influence the geographic dispersion of Japanese operations in India (as measured by investment project numbers)?
2. Can firm-level and industry-level variations in dispersion be detected?
3. To what extent is agglomerative behaviour – one of the key facets of Japanese corporate behaviour - observed?
4. Can trends in the subnational distribution of investment project numbers be detected over time?”

Based on previous studies of FDI location determinants, the authors chooses five components to study. They are

1. Market size and growth.
2. Human capital.
3. Infrastructure.
4. Agglomeration.
5. Manufacturing density.

Using these factors the authors suggest nine propositions:

Proposition 1: Japanese firms preferentially establish larger numbers of operations in more economically advanced regions of India.

Proposition 2: Japanese firms preferentially establish larger numbers of operations in regions of India with higher economic growth rates.

Propositions 1 and 2 relate to market size and growth respectively. It seems fairly obvious that firms will aim to serve areas that have a bigger market. It also stands to reason that firms would look at market potential rather than immediate returns when choosing their locations.

The next two propositions relate location decisions with human capital. Again it seems fairly straightforward to suggest that firms would like cheap but skilled labour. This might be a paradoxical desire for businesses but that would be the ideal situation. Since the degree of skills cannot be easily assessed one needs to use proxies as indicators. Two readily suggest themselves: education levels and labour costs. One may surmise that cheap labour equates to unskilled labour which in turn indicates lower productivity. One may as well pay more to get better quality labour.

Proposition 3: Japanese firms establish larger numbers of operations in regions of India with higher labour costs.

Proposition 4: Japanese firms preferentially establish larger numbers of operations in regions of India with higher education attainment levels.

It is obvious that better infrastructure is an attraction which gives us proposition 5. Government incentives in terms of special economic zones (SEZ) and the better quality infrastructure that is usually provided there gives proposition 6.

Proposition 5: Japanese firms preferentially establish larger numbers of operations in regions of India with superior infrastructure.

Proposition 6: Japanese firms preferentially establish larger numbers of operations in regions of India with greater numbers of SEZs.

Propositions 7, 8 and 9 concern agglomeration effects and manufacturing density. Japanese firms are reputed to follow in the footsteps of their countrymen. If a few Japanese firms establish business in some part of the country then others will follow. This bandwagon effect is quite rational, particularly for businesses. Japanese firms are well known for meticulous preparation and consensual decision making.

Consequently, taking a decision on location can be a painful and arduous process. A Japanese firm that follows knows that preceding firms have gone through the same analysis and can then feel confident about their choice. Higher levels of manufacturing activity can provide us another indicator of agglomeration effect. The effect of manufacturing density is captured in proposition 9.

Proposition 7: Japanese firms preferentially establish larger numbers of operations in regions of India with higher numbers of prior Japanese-owned investment cases.

Proposition 8: Japanese firms preferentially establish larger numbers of operations in regions of India with higher levels of manufacturing activity.

Proposition 9: Japanese firms are more likely to preferentially establish larger numbers of operations in regions of India with higher levels of manufacturing density than are other foreign firms.

The analysis is carried out using data for two periods: 1995/98 and 2004/2008. The authors find that JMNEs exhibit a tendency to locate in regions of India characterized by high GDP levels. This finding holds irrespective of industry affiliation. However GDP per capita has only a small effect on investment numbers and regional growth figures also don't seem to drive investment.

The relationship between wage structures and investment seems weak. After controlling for regional labour productivity in India, the effects of wages on Japanese investment numbers diminishes. In both time periods Japanese corporate behaviour in India is driven more by labour productivity than wage considerations. Indicators for quality of human capital at the state-level show that higher the availability of educated personnel, more likely that instances of Japanese FDI will be observed.

The effect of Indian infrastructure on Japanese location decisions is equivocal. The period 1995/1998 exhibits a positive relationship with investment, with the effects for road infrastructure being small and more pronounced for railway networks. The latter period (2004/2008) only shows a positive effect for railways. Most surveys on drivers of location in India as a whole or regionally flag poor infrastructure as a major impediment. The analysis by Horn and Cross suggests otherwise. It is possible that Japanese investment is directed at market development rather than using India as an export platform. In both periods, the existence of EPZs (1995/1998) and SEZ numbers (2004/2008) are positively correlated to Japanese investment numbers.

In both time periods, there is a strong effect of prior Japanese investment projects as a location determinant. In comparison to other independent variables this country of origin effect is by far the strongest. The GIS data analysis confirms an intensification of agglomerative tendency among JMNEs in India over the two periods under investigation.

Japanese investment is strongly and positively related to levels of manufacturing activity at regional levels. This is true when levels of manufacturing activity is measured by the number of workers in manufacturing regionally. When measured proportionally to total number of workers or total population the effects are less pronounced. The location effects are more pronounced for Japanese firms than for other nations. With respect to industry effects, significant differences in investment strategies are exhibited for the electronics, chemical and IT sectors. The IT sector seems to exhibit more pronounced agglomeration effects than others, but that would probably be true of Indian firms as well.

6.2 Alliance Management between Japanese MNEs and Indian firms

Varma, Awasthy, Narain and Nayyar (2015) attempt to understand alliance management capabilities through the different phases of the alliance life cycle in the context of three Indo-Japanese joint ventures (JV) with diverse alliance outcomes. This study, that uses the case method is pertinent to our paper in that it highlights the connections and relationships that drive changes in business systems. To maintain anonymity the names of the firms have been omitted in the paper.

There are typically three different stages in the life cycle of an alliance:

1. The formation phase where the firm evaluates its decision to form an alliance and selects an appropriate partner.
2. The design phase where the firm sets up an appropriate governance structure and design for the alliance. Alliance success depends on appropriate choices about the structure and contractual terms of that alliance.
3. The post-formation management phase where the firm has to manage the alliance after it is up and running.

6.2.1 Case profiles:

JV1 was established in 1987. The partners were a Japanese firm with expertise in industrial automation and a leading Indian firm with a long history in refrigeration. There a third partner, a government of Karnataka state enterprise. The Japanese were interested in entering India for strategic reasons and the Indian firm wanted access to Japanese technology. Since this was at the time of the license raj the only way of getting a license was to involve a state owned enterprise, which exited after a period. It should be noted that the Japanese had a long association with the Indian firm before it struck up the alliance. The alliance worked successfully for 16 years before it finally ended amicably. The Indian firm achieved its goal of technology transfer and training and the Japanese firm set up its own operations.

JV2 involved the auto components sector. This involved a JV with an existing Indo-Japanese joint venture. The Indian partner supplied auto parts components to the older joint venture. The Indian firm primarily sought technology transfer which required detailed information including specification of machine tools, auxiliary equipment and technical support for a period of seven years. Initially, the Japanese firm was reluctant to take an active role in the venture, partly because of its experience with a previous JV. However, the Indian firm persisted and brought about changes in its processes and engaged in a long and painstaking interaction with the Japanese firm, eventually wearing down its resistance. Eventually, the Japanese firm was convinced about the Indian firm's commitment and had a fruitful association which was still continuing at the time the paper was written. The Indian firm went from strength to strength collecting many awards and signing joint ventures with other firms.

JV3 had all the markers of success as it was a joint venture between a leading Japanese telecommunications operator and a one of the leading business houses of India. Instead it was a failure. The Indian firms wanted access to Japanese technology and investment and the Japanese firm wanted access to a growing Indian market. The immediate cause for the collapse of the deal was the inability to get a license for Delhi circle, a very lucrative market. After that the venture lost three licenses after they were cancelled by the Indian courts. Besides this there were differences between the working styles and the strategic intents of the two entities. A compounding factor was the hyper competitive state of the Indian telecommunications market at this stage.

There are a number of possible conclusions one can draw from these cases, though one must be aware of the perils of generalisations on such a small sample. It would also do well to remember that two of the cases date back to a different policy regime while the third is of relatively recent provenance. First, the policy regime left very little choice about the mode of entry of the Japanese MNEs into India at that time. All the Indian partners were interested in technology transfer, and the Japanese wanted to enter a promising market. In all instances mutual trust was instrumental in the establishment of the alliance and both formal and informal methods were necessary for the alliance to work.

In the case of JV1 and JV2 factors which helped in forming a good working relationship included

1. Clear roles.
2. Mutual trust.
3. Consensus and consultation in decision-making.
4. Mutual understanding of differences in culture.
5. an appreciation of the Japanese style of management and finally.
6. Communication. Trust and cultural compatibility in a business environment emerge as a key factor that drive the success of an alliance.

6.3 Japanese company strategies

The final paper that we will discuss is Kondo 2012, which looks at strategies adopted by Japanese firms for their operations in India. The author compares favourably the relatively higher levels of success of Korean firms and attributes it to their strategies. The paper does not use data sets or follow any particular methodology and it is largely based on newspaper articles. Nonetheless it provides us with insights that could be investigated with data and is useful.

The main strategies that the paper discusses are

1. Large scale investment at the time of entry.
2. Working through joint ventures.
3. Central decision-making.
4. Adapting to the Indian market.
5. Large scale advertisement campaigns.
6. Corporate culture and fostering understanding.
7. Human resource relations
8. Chambers of commerce.

Kondo 2012 suggests that firms which enter the market on the back of large investments, like the Korean firms of Samsung and LG are more likely to be successful. Small, tentative entry with an intent to understand the complex Indian market soon falter. He also notes that several Japanese firms that entered the Indian market in a big way also came to rue their decision, but he nevertheless persists in his prescription. He notes that the preferred route of entry for Japanese firms have been through joint ventures which require a lot of managing. In particular he notes that a lot of Indian firms are family businesses and are not always transparent and do not follow the logic of markets or sound management. The commitment of the top management to the Indian market is also very important. He notes that the success of Maruti-Suzuki depended a lot on the leadership of Osamu Suzuki.

Kondo suggests that adapting to the market has been a notable failure of Japanese firms. In contrast Korean firms did extensive market research to find out which features were suitable for the Indian market. However, some Japanese companies such as Panasonic and Daikin have been more proactive. Large advertisement campaigns are also needed for the success of products as the example of Toyota Innova shows. Of particular importance is the corporate culture of the Japanese firm. He notes that often there is very little faith in the management capabilities of Indian managers among Japanese firms. The relationship between the management of the subsidiary and the parent Japanese firm is often frosty and plagued by mutual incomprehension. Expatriate Japanese managers typically find it difficult to fit in culturally and have problems with food. The Korean firms on the other hand have again gone to great lengths to assuage these problems. Training Indian staff has also proved to be a major challenge. Typically Japanese firms rely on workers with very high skill levels and a sound understanding of Japanese production processes. Getting Indian workers to these levels requires a lot of investment. There is need for training on the Japanese side as well since finding Japanese workers who are conversant with India is a challenge. Japanese firms are loath to delegate authority to Indian managers. This results in slower decision-making. On the other hand it is also cheaper to hire Indian managers and the money saved could come in handy, particularly in nascent stages. This is in contrast to western firms who have far more confidence in the abilities of Indian managers. In terms of labour relations he notes that non-Japanese companies suffer fewer strikes and there needs to be improvement. Finally, Japanese Chambers of Commerce and JETRO need to be more proactive and emulate the Indo-German chambers of Commerce. It should be noted that Kondo's paper is quite old and much may have changed over time. Now there is a Indo Japanese Chamber of Commerce and Industry and JETRO is more proactive.

7 Conclusion

We have provided a discussion of business groups in general and Japanese and Indian business groups in particular. This was motivated by the relatively recent Japanese commercial interest in India. More and more Indian and Japanese businesses are interacting and sooner or later Japanese firms will have to interact with Indian business houses. The question is what shape this interaction will take. One of the reasons for the existence of business houses is imperfect markets and that is a feature of Indian markets. Japanese industrial structures were marked, in the past, by the presence of the zaibatsu and the keiretsu. It is possible that those structures may be replicated when Japanese businesses interact with Indian ones.

The current literature is limited and is based mostly on case studies. It is important to get more extensive data through which we can explore the interaction in quantifiable terms. The obvious next step is to find some answers through surveys of Japanese and Indian businesses that interact with each other.

References

- Anand, J., and Delios A., 1996, Competing Globally: How Japanese MNCs Have Matched Goals and Strategies in India and China, *The Columbia Journal of World Business*
- Aoki K, and Lennenfors T. T., (2013), The New Improved Keiretsu, *Harvard Business Review*.
- Bassino, J, Jensen, P and Morini, M., (2018), The Evolution of Japanese Business Networks in ASEAN Countries Since the 1960s, *Complex Networks and their Applications*, (Cherifi et al., eds). Springer International Publishing.
- Chandler, A. D., Jr. (1962). *Strategy and Structure: Chapters in The History of The American Industrial Enterprise*. Cambridge, Ma: MIT Press.
- Chandler, A. D., Jr. (1977). *The Visible Hand: The Managerial Revolution in American Business*. Cambridge, Ma: Belknap Press.
- Chandler, A. D., Jr. (1990a). *Scale and Scope: The Dynamics of Industrial Capitalism* Cambridge, Ma: Belknap Press.
- Colpan, A.M and Hikino, T (2010). “Foundations of Business Groups: Towards an Integrated Framework,” *The Oxford Handbook of Business Groups*, OUP
- Dow, S, McGuire, J, Yoshikawa, T., (2011), Disaggregating the Group Effect: Vertical and Horizontal Keiretsu in changing economic times, *Asia Pacific Journal of Management* 28.
- Giroud, Axele, MNEs in Asian Business Systems in *The Oxford Handbook of Asian Business Systems*, OUP 2018.
- Horn, S. and Cross, A., (2016), Japanese Production Networks in India: Spatial Distribution, Agglomeration and Industry Effects, *Asia Pacific Business Review*, 22:4, 612-640.
- Japanese Multinationals in Asia*, Dennis J. Encarnation (ed.), Oxford University Press, 1999.
- Koike, R., (2004), *Japan’s Foreign Direct Investment and Structural Changes in Japan and East Asia Trade*, IMES, Bank of Japan
- Kondo, Masanori (2012), *Strategies for Japanese Companies in India*, RIETI Discussion Paper Series 12-E-064.
- Lincoln, J. R., and Shimotani, M., (2010), *Business Networks in Post-war Japan: Whither the Keiretsu?* *The Oxford Handbook of Business Groups*, OUP
- Matous, P and Yasuyuki, T, (2015), “Dissolve the Keiretsu or Die”: A longitudinal study of disintermediation in the Japanese automobile manufacturing supply networks. RIETI discussion paper 15E039.
- Sarkar, J., (2010), *Business Groups in India*, *The Oxford Handbook of Business Groups*, OUP
- Urata, S., (1993), *Japanese Foreign Direct Investment and its Effect on Foreign Trade in Asia*, NBER.
- The Japanese Economy* by David Flath, OUP 2014.
- The Japanese Economy* by Mitsuro Taniuchi, gale Asia 2014.
- Williamson, O. E. (1971). “The Vertical Integration of Production: Market Failure Considerations,” *American Economic Review*, 61: 112–23.
- Williamson, O. E. (1985). *The Economic Institutions of Capitalism*. New York: Free Press.
- Witt, Michael A. and Redding, G., (2014) *Asian Business Systems: Implications and Perspectives for Comparative Business Systems and Varieties of Capitalism Research in The Oxford Handbook of Asian Business Systems*, OUP 2018
- Witt, Michael A., (2014), *Japan: Coordinated Capitalism Between Institutional Change and Structural Inertia in The Oxford Handbook of Asian Business Systems*, OUP 2018
- Varma, S., Awasthy, R., Narain, K. and Nayyar, R., (2015), Cultural Determinants of alliance management capability-an analysis of Japanese MNCs in India, *Asia Pacific Business Review*, 21:3, 424-448.

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