New Building Blocks for Jobs and Economic Growth

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Background paper for the conference session:

“Global Competition and Collaboration”
GLOBAL COMPETITION AND COLLABORATION

1. Context

1. An enduring lesson of the financial crisis and subsequent recession is, curiously, a positive one: that is, we learned how utterly intertwined our economic lives have become and how interdependent our successes and failures must be. While nations, companies and individuals seek to cope with the aftermath of the financial collapse, it is tempting to focus on narrow issues related to the economic slowdown. However, a larger question is how to encourage competition that spurs innovation, creativity and broader economic success while fostering a system that facilitates collaboration and co-operation where useful. The timeliness of these issues is driven by the demands of increasingly service-oriented economies in developed nations and by the premium on service that technology has provided developing countries.

2. The interaction of competition and collaboration is significant for public and private leaders because the impact of those factors on economic success or failure can help frame the design of programs that influence economic outcomes. Both competition and collaboration are intangibles whose elements can be identified, measured and managed.

3. Likewise, the dynamics of global competition and collaboration help determine how intangibles are developed and utilised in this global environment. Some intangibles are used to create a competitive advantage and develop differences among products and companies. For example, intellectual property and brands are key differentiators in a competitive marketplace. Other intangibles, such as organisational processes, are important for instigating and maintaining collaboration. Still others, such as reputation, can be either a competitive differentiator or a key element in creating co-operation.

4. The importance of understanding the impacts of collaboration and competition is heightened by the increasing percentage of wealth derived from intangibles-oriented services rather than manufacturing of tangible goods, and of the increased profitability accrued by companies which ‘wrap’ intangible services like maintenance around their tangible products. Elements of the ‘package’ – whether it be the manufacturing, the supply of labor or the service component – can all be outsourced to business partners, lessening risk and cost. Understanding these forces is crucial.

5. It is useful to define terms: Competition occurs when movement of any one agent towards a goal decreases the chances of success by others. Collaboration or co-operation occurs when several agents are interdependent in that movement of any one towards a goal they all seek increases the chances that the others will also reach that goal. These definitions were written by Jack and Gordon Abra in their 1999 book Collaboration and Competition. The question that global economic decision-makers need to answer is how to measure and manage the interaction in ways that are optimally productive.

2. ‘Frenemies’ - Enhancing Competitive Capabilities

6. The notion that competitors could also be suppliers and business partners has long been a part of business reality. It was in the 1990s, however, that businesses began to codify the knowledge gained from that experience. The term ‘frenemy,’ combining elements of the words ‘friend’ and ‘enemy,’ conveys the complex nature of business relationships in an era in which technological advances have such a dominant impact on strategy. Earlier technologies like the loom, electricity or the automobile, while significant in terms of their impact, tended to have localised influence first. In the current era, by contrast, the market and the impact are global and involve widespread change at a faster pace than occurred with earlier inventions. Long before the concept of ‘networks’ conveyed images of young adults facebooking on
mobile phones, business owners recognised that the complexity of supply and demand required an adaptive approach to collaboration. This was driven by self-preservation and the mutual benefits that could accrue from co-operation. As James McQuivey of Forrester Research was quoted as saying, “If you have to deal with the devil, you might as well deal with the one who needs you the most.”

7. Whether the purpose is assembling aircraft, toys or software, the global supply chain demands not just close co-operation, but sharing of such valuable strategic assets as intellectual property and personnel. This requires a degree of trust often difficult to attain from mere competitors. The strategic absolutes of global commerce mandate close co-operation in order to provide high quality, lowest-possible-cost products and services. Without that, competitors will identify operational cost weaknesses, emerge to take advantage of them and eventually prevail. To achieve the level of trust to defend against such threats, whether disruptive innovations or simply cheaper production costs, requires belief in the honesty of one’s partners as well as the potential for mutual benefit based on the analysis of how to protect competitively sensitive information, while at the same time sharing information which enables the production process to proceed.

8. With hardware and software advances of the past decade, a sustainable competitive advantage is usually temporary and sometimes illusory. In pharmaceuticals, for instance, the growth of generic competitors like Teva challenged the economic models on which industry standard bearers like Novartis and Pfizer had based their projections. As a result, a host of deconstructed models emerged. One example is the CRO or contract research organisation which off-loaded some of the cost - but also some of the potential profit – of new drug research and trials from ‘Big Pharma.’ The potential financial risk of drug research was offset by the emergence of such task-oriented partners created to absorb upfront costs in return for participation in the downstream profit. That some CROs or other subcontractors might also be doing business with or even be funded by one’s competitors is simply part of the ‘frenemy’ landscape.

9. The entertainment industry provides vivid examples of this development. Time Warner, Disney, Fox, Canal Plus, BBC and other content providers are also channel owners. The interlocking relationships extend to financing, co-producing, distribution and marketing. With a fierce rival, one may well be simultaneously a supplier, client, financier and co-owner of properties. The benefit is that organisations are deploying their intangible assets in a manner designed to optimise returns on expertise and opportunity. Accounting conventions are sophisticated enough to demarcate who owns what.

10. The proposed merger of the New York Stock Exchange with the Deutsche Borse is being pursued in the belief that the combined entities will be able to offer greater scale and trading efficiency. In addition, the combination would have financial strength to invest in technology and emerging trading formats. Developments like these are why the ‘frenemy’ model works: businesses have learned that long-term planning requires frequent adaptation to changing conditions and disruptive technologies or processes. Being nimble, through partnership, is sometimes the only way to survive.

3. Specialisation

11. The harsh reality of global sourcing implies that no company can afford to waste time or resources, due to the continuing pressure from lower cost suppliers in other geographic locations or functional specialties. In particular, no company can underestimate the potential impact of the knowledge or experience of a business partner in which it has invested or in which value may be accruing. Capturing the value provided by a partner which has already invested in potentially beneficial products or services increases profitable market penetration at greater speed than might otherwise be possible by employing the conglomerate model that attempted to capture every stage of the value chain under one owner. This distributed value model is one of the most significant promises of a global, technology-dominated economy because it enables finance to focus on finance, and manufacturers to focus on manufacturing.
12. Specialisation is one way that businesses and countries adapt to benefit from the global economy. Companies focus on specific products or elements of, or contributions to, the production process. Manpower Inc., the temporary-help provider can now staff a factory whose real estate is owned by one collaborator, whose machinery is owned by another separate business and whose inventory is owned by a third. Another example is that of Indian outsourcing technology company, Infosys. Its partnership with enterprise software and services provider Oracle is an example of strategic co-operation that permits each company to do what its experience and organisational structure is best designed for. Oracle creates product and sells some of it. Infosys can provide sales support and service more efficiently than can Oracle. BP’s partnership with Transocean, in which BP identifies the opportunity, organises the drilling and financing but then turns over actual responsibility for the execution of the rig management is an example of co-operation that makes sense in theory. The huge 2010 oil spill in the Gulf of Mexico illustrates what happens when the interface in the co-operative partnership is not effectively managed.

13. In a sophisticated adaptation to global demand, countries and regions are now specialising in stages of production in specific industries. For instance, Germany is known for the quality of its machine tools. Italy’s Brescia region and eastern Belgium are known for skilled manufacturing. Countries such as Brazil, Russia, India and China are moving up the value chain. For instance, China has now supplanted the US as Brazil’s largest global trading partner. Currently, Brazil provides commodities, most prominently soybeans and oil to China. However, as Brazil’s expertise expands in technical realms, such as deep-water drilling, the nature of that trade will change. China’s recent $10 billion loan to Brazil for technical assistance is an investment in that higher value-added future. Lenovo’s acquisition of IBM’s personal computer brand and manufacturing, as well as Tata’s acquisition of the Jaguar brand and assets, are recent illustrations of how corporations in developing countries are moving to optimise their advantages. Hummels et al (1999) estimate that 30 percent of world trade can be attributed to this sort of production-stage specialisation. Countries that have benefited from such developments include Ireland, Taiwan and Mexico.

14. Growing global wealth, especially in developing nations, combined with technological advances, leads to decreases in the opportunity for sustainable competitive advantage because competitors, lenders, shareholders, suppliers and customers all have access to more information. With that information, they can make better judgments about what actions are in their own best interest. To achieve even first-mover advantage for a short period of time, effective utilisation of every corporate asset becomes a significant competitive differentiator. That means that training, process improvements, knowledge support, co-operation and other applications of intellectual capital are critical. That is why reassessment of competitive capabilities has led corporations to pursue co-operation as a financially optimal strategy, even in industries deemed critical to national interests. Chrysler’s merger with Daimler Benz and then with Fiat is one example of this. The Nissan-Renault partnership is similar. In both cases, one CEO runs both of the partner companies which retain their separate identities for marketing and political purposes. Management and operational control is aggregated under one leader.

15. In the case of Boeing and EADS/Airbus, subcontracting production has been a strategic marketing decision, since so many of their customers are nationally controlled airlines. EADS was created by merging nationally supported aerospace manufacturers and has emerged as the only significant global competitor to Boeing. It provides a useful example of how co-operation and specialisation, though not without problems, can stimulate competitive advantage on a complex transnational scale. Specialisation is one manifestation of co-operation that can be beneficial to businesses, countries and regions.
Box 1. Questions for Discussion

The benefits of co-operation and collaboration are manifest, yet challenges to encouraging alliances, partnerships, joint ventures and other manifestations exist. The issue facing policy makers is not justifying the benefits, but deciding what actions are required to remove obstacles to beneficial forms of co-operation.

- What are the cultural and institutional impediments to encouraging greater co-operation and collaboration among businesses?
- Are the obstacles to transnational co-operation similar or different?
- Is government intervention to remove these obstacles necessary? Would it help, or possibly make the situation more complicated by producing unintended consequences?
- What types of intangibles are needed to foster collaboration, and which require collaboration for their creation and utilisation?

4. Cost Containment and Value Chain Management

16. In spite of the fact that added value derived from intangibles like collaboration may not meet GAAP or IAS standard criteria, their value is apparent to managers. Intangibles like IP and business partnerships or alliances must be recognised and managed as business assets even if they do not yet qualify as financial ones. As companies expand into emerging markets, the strategic cost of sharing intellectual capital and property with potential future competitors becomes an open part of the economic equation. Boeing and EADs have acknowledged that cost in their subcontracting negotiations. In fact, it is not clear that the so-called GAAP standard is even particularly meaningful anymore: companies continue to search for beneficial ways in which to disclose information about themselves with or without formal sanction. They are letting the markets inform them about what constitutes value. This trend will only grow as companies begin to harvest the promise of web-based social networks. As of late 2010, over 500 public companies globally produce supplements to their annual reports on such issues as sustainability, child labor and product quality because they recognise the value that these intangibles contribute to their reputation and operational performance.

17. Evaluating the relative contribution of co-operation versus the benefits of competition requires an analysis of the factors that drive costs. Among the determinants of cost that must be considered and about which there has been some debate are merger and acquisition failure rates, transaction costs, buy versus build scenarios, supply chain management, internal competition and information hoarding.

18. As an illustration of the power of business partnerships and alliances, it is worth noting that many successful global companies owe critical elements of their success to co-operative ventures. A significant element in Walmart’s success has been its investment in advanced information systems, frequently in partnership with suppliers, to lower inventory costs by reducing transportation and warehousing time. Procter & Gamble became Walmart’s largest supplier because of its early recognition that sharing sensitive price and volume data enhanced margins for both. Similarly, forcing suppliers to install RFID technology was a burdensome initial cost, but it also gave Walmart suppliers useful information from which they could better manage their own value structure. Automotive subcontractors like Arcelor Mittal, VAG (Volkswagen Audi Skoda) and Delphi have moved beyond providing components to designing and installing sub-assemblies that may account for as much as 40% of the value of the car. In the US pharmaceutical industry, the combination of drugstore retailer CVS with wholesale merchant Caremark has enabled the combined company to partner with health insurers like Blue Cross/Blue
Shield to lower prescription drug costs. This co-operative sharing of responsibilities and benefits has changed the way business is conducted in these industries.

19. Co-operation through partnership may offer greater long-term value than more formal combinations. Merger and acquisition failure rates are high by the standards of business investment success. Deloitte, among others, has reported that approximately 65% of mergers and acquisitions fail to achieve their financial or operational goals. The reasons have to do with a host of factors, many of them intangible: personnel conflicts, post-merger integration problems, communication misunderstanding, overly optimistic predictions tied to executive bonuses, and computer system incompatibility, among others. The price a company’s equity traditionally falls when a merger or acquisition is announced because the markets anticipate, based on experience, that the costs of integration will be higher, the pace of integration slower and the likelihood of success lower than expected. The cost to shareholders, then, represents a significant negative cost to this type of formal and tangible co-operation.

20. Transaction costs are incurred in all market exchanges. The debate about whether co-operation or competition lowers transactions costs is an old one. The academic literature, while replete with support for both cases, leans towards co-operation as the more beneficial. Park and Russo (1996) point out that a history of competition tends to contribute to joint venture failure. Park points out that strategic alliances have a history of opportunism, instability and performance failure. However, the costs of attempting to ‘go it alone’ may be so significant as to threaten the company’s independence. Galbi (1996) and others note the increase in advertising and other marketing expenses that accompany increased competition in any sector. The necessity of offering discounts and other promotional expenses may also unfavorably impact margins.

21. On balance, the cost of co-operation, while sometimes high, must be judged relative to its benefits. The benefits that accrue from co-operating generally outweigh what would otherwise have been achieved on a solo basis, as has been the case in large scale manufacturing businesses in such sectors as automotive, aerospace and pharmaceuticals. Similarly, in enterprise software and services, as well as in retailing and consumer goods manufacturing (from clothing to processed foods), these combinations have proven their worth. Co-operation increases companies' competitive power. The two are complementary, not mutually exclusive.

22. Buy-versus-build scenarios refer to analyses conducted by businesses to determine whether to create a new product internally or enter a new market by buying, e.g., acquiring the product, technology or market share. Among the relevant considerations are speed to market (which of the two options will provide faster market entry and faster accrual of profits) and the long-term cost of maintenance (which can be outsourced if the product is bought). While there is no right answer, because so many situations are unique, the competition vs. co-operation analysis will often lead companies to buy so as to forego upfront financial costs of investing in the ‘build’ option while speeding the market entry opportunity.

23. Supply chain management has become a critical component of corporate competitiveness but hard-won knowledge about the benefits and challenges of global sourcing have led corporations to conclude that co-operation underpins success. Managers used to approach supplier contracts like gladiatorial combat; the goal was to wrest as much advantage as possible out of the supplier without driving them out of business. Toyota, among others, set the example for a new era in which the supplier and purchaser were partners, which could each thrive based on co-operation.

5. Innovation

Microsoft-Intel is one of the most successful examples in recent history. In addition to the Walmart-P&G, Infosys-Oracle examples mentioned above, cross-industry ‘best in class’ collaborations are growing. For instance, a Chinese home electronics manufacturer has partnered with Mercedes Benz to improve its lean production techniques. Competition with other groups thrives, but even in this realm today’s competitor may be tomorrow’s collaborator.

25. Disney and Apple are another example of cross industry collaboration in which companies ostensibly in separate fields find that changes in platform technology and channel distribution provide opportunities for mutual benefit, even though they may later become competitors in that space. Similarly, Nokia- Microsoft represents another transnational partnership in which the telecom handset provider and software company are planning on combining their capabilities in different parts of a converging market. The overarching lesson is that in the case of innovation, the benefits of co-operation outweigh the putative advantages of competition. It is again worth emphasizing that the advantages from co-operation manifest most productively by enhancing the combined entities’ ability to compete. For instance, Medtronic’s experience in cardiac technology has given it insights into the chemistry and biology underpinning neuroscience to enable it to enter the market for brain monitoring technology.

6. Social Networks and Media

26. The most dramatic development affecting questions about competition and co-operation is the rise of social networks as a channel for delivering and receiving information about customer interests. What social networking enterprises aim to do is harness the knowledge, desire, feedback and intentions of customers to provide data that can be utilised to make design, marketing, pricing and strategic decisions.

27. Buying through social network sites to which retailers are linked will enhance the impact of the trend towards greater co-operation as technology firms work in partnership with retailers to perfect their offerings. Increasingly, large retailers are co-operating and then purchasing technology firms to capture the profits they anticipate. Walmart’s recent acquisitions of VUDU and Kosmix fit this description. Collaboration between retailer, social network and customer could deliver more choice of higher quality at lower price in a shorter time. To work, this requires a substantial co-operative partnership between the retailer and the social network provider because they must share competitively sensitive information about systems and negotiate revenue sharing protocols. This arrangement is, once again, based on trust and operational fluidity. Providing a co-operative, adaptive system that permits dynamic or variable pricing has been pioneered by airlines and hotels. Applying the adaptive model more broadly in on-line commerce could introduce another element of co-operation: the tacit agreement between seller and customer that having the buyer’s purchasing behavior influence cost is an acceptable way to determine price. Technology, convenience and new channels of distribution may create new avenues of co-operation.

7. Reputation

28. Co-operation enhances corporate brand and reputation because it can provide first-mover advantage. An example is the benefit to market share, sales and profits that fashion designers derive from having their wares sold at prominent retailers and the concomitant benefit retailers enjoy from offering such products. Burberry is one example of this effect. Louis Vuitton and Hermes are similar. While each brand has its own stores, its reach and appeal are enhanced by the availability of certain products in the stores of others, particularly like Harrods and Saks Fifth Avenue. In the technology world, the mutually reinforcing relationship of Microsoft and Intel provides consumers with that reassurance. Similarly, marketing partnerships can be construed as endorsements of both the provider and the recipient. Barclay’s underwriting of the English Premier Football (soccer) League conveys the bank’s endorsement of the league’s stability, while being associated with the League provides Barclay’s with the familiarity and favorability of the sport and those who follow it. Specific team endorsements within the Premier League by
the Emirates airline and Aon insurance offer these non-UK domiciled companies the association with a preeminent international brand. These elements of perception can contribute to public attitudes about business that affect regulatory policy.

8. **Competition Policy and Co-operation – Shaping the Information Economy**

29. Policies that determine the intensity of competition also affect innovation. However, economic theory and empirical studies have so far been unable to determine the level of competition optimal for innovation. On the one hand, strong competition encourages companies to innovate to catch up with and surpass competitors. On the other, a degree of market power may stimulate innovation by facilitating the recovery of related expenses. Some research indicates that many industries exhibit an inverted U-shape correlation between market concentration and business R&D, suggesting that moderate levels of competition are most highly correlated with more innovation (to the extent that concentration and R&D are good proxies for competition and innovation, respectively). However, this relationship is influenced by the industrial sector in question and the stage of technological development.

30. New business practices enabled by information technologies have created particular challenges for competition authorities. Shapiro (1999) and Farrell and Shapiro (2004) underscore that the key goals of competition policy in the information economy should be to erode monopoly power where this persists, and to prevent the use of monopoly power to restrict competition in adjacent markets. While the authors do not see a need for technology-specific enforcement policy, nor an extension of the reach of competition policy, they draw attention to features of the information economy that can bring new forms of restriction to competition, and new challenges for antitrust analysis. These features relate to:

- The *enhanced role of intellectual property in business strategies*. Issues that can arise for competition authorities relate to mutually blocking patents - which require a need for patent pools or cross-licenses - and the protection of trade secrets.

- *Economies of scale for information products*. Many information products involve large scale economies given that after the costs for the first copy have been incurred, subsequent marginal costs can be negligible. Producers are also under pressure to engage in price discrimination, producing multiple versions of a related product – such as software – for slightly different market segments. This can pose practical challenges when trying to identify abuses of market power.

- The increased incidence of *complements and interfaces*. Many high-tech products are constituted from complex systems of components that need to interface both with each other and, in some cases, with external networks. Consequently, firms must work together to set standards and ensure interoperability. This process of working together raises the possibility of collusive practices.

- The *importance of networks* and the effects of network economies. Networks generally become more valuable as they increase in size (in terms of nodes or users). Networks thus exhibit scale economies, from the side of demand. This accentuates the importance for competition of the terms on which access to a dominant network can occur. Virtual networks – such as the network of users of Microsoft Word - are also extremely important in the information economy. As virtual networks grow, the control of interfaces and compatibility standards, among other issues, increase in importance. Shapiro (1999) underlines that control over interfaces is one of the key issues in competition policy in the information economy. Indeed, the case brought against Microsoft by the US Justice Department centred on the control of the browser element stemming from control of the operating system.
Box 2. Questions for Discussion

- How should the interplay between IPR and competition policies change, if at all, to drive next generation innovation systems? For example, is the standard for meeting the inventive step element when applying for a patent set at the right level now, given that both IPRs and competition can drive innovation? If not, is it too high or too low?

- What can merging companies and antitrust authorities do to enable a more thorough and rigorous consideration of dynamic efficiency claims (e.g. the claim that a merger would enhance innovation) in the merger review process?

- Is the large backlog of patent applications being used strategically in ways that thwart competition and stifle innovation? If so, how can that problem be most readily solved?

- Should competition law enforcement agencies adopt different standards when analysing conduct in rapidly evolving markets and technology markets to take into account the benefits that the conduct might bring in terms of growth and competitiveness, even though the conduct might be harmful to competition from a static perspective? In other words, should there be an “innovation defence” in antitrust cases involving certain types of collaboration, such as R&D joint ventures, standard setting, cross-licensing arrangements, and patent pools?

9. Disclosure of Co-operation in Corporate Reports

31. Intangibles such as co-operation, alliances and partnerships are not captured in formal disclosure requirements. This may contribute to institutional biases that penalise efforts to engage in more productive behavior. The ability of managements to provide markets with credible, quantifiable bases for decisions about competitive strategies, alliances, brands and other intangibles will serve the interests of all market participants.

Box 3. Questions for Discussion

- Would the measurement and disclosure of co-operation’s impact on financial and operational outcomes increase managerial effectiveness?

- Does the role of co-operation need greater elucidation in financial reports so that its impact can be identified and measured?

- With the rising importance of consumer participation in the co-creation of value in goods and services, might corporate reporting of intangibles like cooperation’ have a role in defining and capturing the consumers’ contributions, while increasing incentives for consumer cooperation?
BIBLIOGRAPHY


