PRIVACY RIGHTS AND POLICY WRONGS:
How Data Restrictions can Impair Information-Led Development in Emerging Markets

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1 Executive Summary

This paper highlights a potential threat to a new model for economic development posed by European-style data privacy regulatory regimes. Specifically, it is argued that Information Led Development (ILD) holds many advantages for emerging markets as a mechanism for growth, and that the European Union's current approach to data privacy may harm this model. These arguments are summarized immediately below.

In the second section, it is proposed that ILD is a promising model for economic growth for less developed countries that meet certain preconditions (including an educated labor force, and sufficient technological infrastructure). The third section discusses the technological changes enabling ILD. Section 4 examines India as a model of ILD in the context of mutual benefits for data importers and exporters. Section 5 briefly explores how other emerging markets may seek to emulate the Indian model, and discusses several potential barriers to adoption. In turn, Section 6 analyzes the processes by which contending data regimes are exported from advanced industrialized nations to emerging markets. The concluding section, then, includes some possibilities for the future of ILD in different types of emerging markets.

1.1 "Adequacy" and the Privacy Threat

Nations such as India, Ghana, the Philippines, and Malaysia are exploiting their comparative advantage in relatively abundant, highly educated labor to enter the global market in Information Technology Enabled Services (ITES). Other similarly endowed nations, particularly those that were part of the former Soviet Bloc, have just begun on a similar path. However, the countries of the EU, motivated by concerns over consumer privacy, have erected regulatory barriers to trans-border data-flows. These data regimes, rather than placing emphasis on the prosecution of unlawful uses of personal data, instead establish a prophylactic framework of rights that grant citizens in countries where such laws exist a broad range of rights over the uses of their personal data, irrespective of the purpose or cost—in American parlance, a blanket "opt-in." But most importantly for the purposes of this paper, the Directive prevents flows of data to countries that do not meet certain standards of what is "adequate" to protect consumer privacy.

The primary intent of the "adequacy" clause of the EU directive was to promote intra-EU data-flows and to protect the privacy of European nationals. However, a side effect of the "adequacy" requirement is to compel non-European nations to adopt legislation that meets European standards for "adequacy". By doing so, nations would facilitate data flows from EU-member states. Of course, the world has been slow to react—in 2001, only Canada, Switzerland, Argentina and Hungary had met the "adequacy" test in the judgment of European regulators. Also, American firms that have signed up for the U.S. Department of Commerce's "Safe Harbor" program are deemed "adequate" as well. Outside these five cases however, personal data exports from the European Union are largely facilitated by the use of model contracts that contain certain standard clauses that ensure compliance with the spirit of the Directive.

It is in this context of two quietly competing data regimes—the "harms" approach favored by the United States, and the "rights" approach favored by the European Union—that developing countries eager to attract foreign business must decide which sort of data regime to adopt. Intuitively, it would appear that the rational choice is to adopt the maximal standard—in other words, enact a national privacy law consistent with the directive and subsequently seek certification from European regulators as "adequate". On this view, data-flows to and from Europe are given legal berth, and relationships with firms incorporated in the U.S. are already *relatively* unencumbered given the lack of an overarching U.S. privacy regime.

We believe this view is myopic. One argument explored in this paper is that were India (or some other nation) to adopt a national privacy law comparable to the EU directive, *the net effect on trade and investment stemming from business process outsourcing by foreign MNCs is likely to be negative.* American firms engaged in outsourcing and out-location to countries where such legislation is enacted will be exposed to new liabilities and as a result reconsider or retrench their operations there. We now present the contours of this argument.

1.1.1 The Cost-Quality Equation and Shrinking Savings

Firms outsource or locate facilities offshore based on the promise of lower labor costs coupled with assurances of similar quality. For many firms, this promise has proved too attractive to resist. According to Deloitte Research, $356 billion worth of global financial services will relocate to India in the next five years, producing a cost saving of $138 billion for the top 100 financial service firms. They also estimate that 2 million jobs will move to India -- 850,000 from the United States alone.[i]

However, another report by the same firm seems to contradict these estimates. While direct wage costs may be 80 percent lower in India, the total project cost savings are much more modest -- 10 percent to 15 percent for most companies[ii]. These relatively modest savings are the consequence of the other costs required to do business in India. These costs include lower productivity, cultural differences, incompatible systems, travel costs, communications, equipment and managerial oversight. Were one to add new liabilities, these savings could be eroded further, and the attractiveness of business process outsourcing for U.S. MNCs would diminish commensurately.

1.1.2 EU Law and New Liabilies

On October 28, 1998, the EU Data Protection Directive went into effect. While the intention of the directive is to promote a common minimum standard of privacy protection in EU member states, in practice states are free to impose more stringent rules as they see fit. Moreover, the European Union does not have a single central enforcement body, but leaves to the member states' Data Protection Authorities (DPAs) the responsibility of interpreting and enforcing the laws—together with litigation by aggrieved citizens.

While it has not yet been enforced to anything near what its provisions allow for, the full application of the Directive could prove to be a significant obstacle to cross border data flows. Some authors have even speculated that European data protection authorities

could have jurisdiction over American websites[iii]. Our view is that were India to enact a data protection law consistent with the spirit of the Directive, the numerous American firms engaged in offshore operations there would face significant new liabilities.

The reason for this is the peculiar structure of the Directive. Under Article 4 of the Directive, national law is said to apply: where "processing is carried out in the context of …an establishment…on the territory of a member state"; where national law applies "by virtue of international public law"; and most controversially, where a firm not established in a member state, "makes use of equipment, automated or otherwise."[iv] By making the criteria for applicability the location of facilities, rather than the nationality of the data subject, European law exacerbates an already confusing landscape of competing jurisdiction.

On a fairly straightforward interpretation of Article 4, American firms with facilities in Europe, or outsourcing certain functions to European firms, fall within European jurisdiction *even where the data subjects are U.S. nationals.* So by extension, were India to adopt a law with a similar structure, American firm that either outsource (by virtue of clause 1a of Article 4) or out-locate to India (by virtue of clause 1c of Article 4) could fall under the jurisdiction of Indian data protection authorities, even in cases where the firm dealt solely with U.S. customers.

This is clearly at odds with the nature of today's world of distributed business processes. Consider the following example set in a hypothetical world where India has adopted a data regime fashioned after the EU directive. An American bank is located in New York City. However, their call-center is in Bangalore, and their back office is located in Tampa, Florida. A customer of the bank in Manhattan makes a call to customer service to change their address. The call is routed to the call center in Bangalore. The operator accesses the customer's data remotely from the database in Tampa. The customer verifies his identity through the provision of social security number and his mother's maiden name. He then provides the operator his new address. The operator enters the customer's new address and hits return at which point it is saved to the database in Tampa.

On one interpretation of the law, the operator could be prohibited from saving the customer's address, as the subsequent retransfer (if it is meaningful to even speak of such a thing) is suddenly and counter-intuitively governed by the stricter Indian law. Under the "adequacy" clause, the act of saving the customer's data to the database is prohibited because it would constitute the transfer of data to a country that lacks "adequate" standards—in this case, the United States.

Of course, skeptics may scoff at this example. They might argue that the likelihood of data protection authorities prosecuting such activity is slim. Or one might argue that the subsequent retransfer could be covered by the use of model contracts. Finally one could advance the argument that India might adopt a law where application is based on the nationality of the data subject, rather than the location of facilities, and still potentially receive "adequacy" certification from the European Commission. All three arguments are potentially flawed.

The first argument is flawed because our hypothetical firm would be required under U.S. accounting rules (i.e. Sarbaines-Oxley) to disclose the potential for litigation, however remote. So even were one to accept the assumption that the likelihood of prosecution is slim, the disclosure of potential liability to investors could result in penalization in the markets. Moreover, these required disclosures could make such a firm a target for foreign data protection authorities, and thereby increase the likelihood of prosecution.

The second argument fails to recognize that the adoption of model contracting represents a significant compliance cost in of itself. This sort of complex contracting is precisely the sort of burdensome compliance cost that companies are eager to avoid. Moreover, imagine a U.S. firm maintains a human resources database or a corporate intranet in India. Business practices generally viewed as routine could fall under legal scrutiny. For example, under another provision of European law, the innocuous and useful practice of posting staff photos on the corporate intranet could be viewed as the exchange of "sensitive data" because a photograph includes ethnic information. It is not clear that the use of model contracts would be sufficient or possible in such a situation.

Finally, the notion of structuring Indian law such that it applies based on nationality rather that the location of facilities, in addition to creating a host of logistical difficulties (databases with subjects tagged by nationality), could diminish the chances that European authorities would deem Indian law "adequate." And of course, the presumptive goal is to facilitate data transfers from Europe as well as the States.

1.2 The Directive's Extraterritoriality

Our view is that the proliferation of a European-style data protection regime appears to do little to secure the interests of privacy-minded Europeans. After all, personal data collected on European nationals is generally subject to the protections of European law, and on some interpretations, *always* subject to the jurisdiction of European authorities[v]. Moreover, the adoption of an EU-style data regime—in other words, a regulatory environment consistent with the "adequacy" provision of the Data Protection Directive—by a developing country would potentially deter inflows of foreign business (whether in the form of outsourcing or out-location.)

These sort of "extra-territorial" effects from privacy regimes are easy to grasp; the "rights" oriented approach of the EU has important implications for U.S. or other "third country" firms that depend on data about EU citizens, whether they be customers, employees, or clients.

An oft-cited example of the extra-territorial effects of the "rights" approach is the experience of the SABRE Group. The SABRE Group developed and operates a real-time airline reservation system that is majority-owned by American Airlines' parent AMR Corporation. In 1998, a Swedish court ruled that the company was prohibited from transferring to the United States personal information about Swedish citizens such as whether a passenger prefers a Halal meal (and is therefore Muslim), because the US did not meet standards for "adequate" protections of data.

While the example seems innocuous on its face, the broader implications are significant. Multinationals doing business in countries where the collection and uses of consumer

data are greatly restricted are forced, at a minimum, to find a means to comply with the law. These means would include the balkanization of existing databases to reflect disparities between regimes, or seeking specific exceptions or legal "derogations".

An unfortunate but likely scenario under these conditions is a world in which data no longer flows to regions where the compliance costs exceed the benefits. And it is this scenario, where developing countries are disproportionately affected, that is of particular concern.

1.3 Problems with Labor Migration in AICs

As Swire and Litan point out, a "way to comply with some of the [European Union Data Privacy] Directive's requirements would be to move data processing operations, and the accompanying jobs, to Europe."[vi] But as the following pages suggest, this "solution" overlooks the tremendous massive social costs inherent in labor migration—the very problem ILD circumvents. Barriers to labor migration originate in nations of origination, and nations of destination. Today, labor mobility gives every sign of becoming even more difficult.

Avoiding the controversial question as to whether the popular objections to the import of skilled labor are rational, the objections likely to be raised could be avoided by promoting the growth of ILD. Indeed, the promotion of ILD by advanced economies affords an opportunity to address an issue that has been quietly ignored for generations: namely that the price for increased global equity should not be forced emigration. Unfortunately, privacy regulators in advanced economies, in their zeal to protect data privacy, are on course to prevent an economically efficient and politically expedient solution to the problem of addressing unmet labor needs where immigration is not an issue. For example, some argue that in the United States, a possible driver for the movement to source offshore is the very fact that the H1-B requirements have grown more stringent in the wake of September 11.[vii]

We now turn to the advantages of ILD as a vehicle for development in less-developed countries.

2 The Advantages of Information-Led Development

The "digital revolution" has opened up new avenues of international trade, and altered decades-old patterns of economic rents, comparative advantages, and growth opportunities among the world's economies. While this may strike the reader as "old hat", our interest is to highlight how the unprecedented opportunity to trade services internationally, via Information-Technology Enabled Services (ITES), will permit less-developed countries to skip stages of economic development, and "leapfrog" to a more advanced services economy.[ix]

This leapfrogging is possible, for the first time in history, because many steps of the wealth-creation process can be unbundled for out-sourcing or out-locating. For many educated and talented individuals in poor nations, ITES solves the thorny problem of human capital migration whereby workers are caught between local disincentives to

emigrate (both legal and social), and the restrictive immigration policies of rich nations. Moreover, because ILD diminishes "brain drain", it permits LDCs to capture and retain their expenditures on education and social services, and alleviates fears that such expenditures on social capital formation end up subsiding rich nations' human capital investment.[x]

ILD has significant collateral benefits for LDCs. These include rapid growth in small local start-ups and increased public and private sector investment in human and physical capital. Ideally, these will in turn foster a critical mass of self-confident entrepreneurship and managerial skills. Bangalore's burgeoning technology sector is a particularly compelling example of this.

2.1 The ILD Model

We believe the ILD model suggested by India can be construed as follows:

1) Data is a fungible commodity
   a) Data migration, as opposed to labor migration, permits countries to avoid political, social, and economic costs associated with cross-border labor flows.
      i) For labor exporting countries: brain drain
      ii) For labor importing countries: political costs of immigration policy
   b) Data migration, as opposed to labor migration, permits firms to benefit from reduced input costs
      i) Lower salaries, commensurate with lower cost of living in LDCs.
      ii) Lower capital costs
      iii) Subsidies from LDCs eager to promote foreign direct investment and out-location.
2) Comparative advantage of LDCs in ILD model is human capital, not natural resources
   a) ILD enables LDCs to "leapfrog" stages of wealth generation process.
   b) Rapidly maturing, freer markets in LDCs.
      i) Natural resource model (renewable, or non-renewable) encourages crony capitalism
      ii) ILD model encourages advanced market capitalism and entrepreneurial climate
   c) Cross-border data and capital flows enabled by ILD are a check on political and military overreach by LDCs.[xi]

2.2 Locating Data Processing Hubs

Hubs for remote data processing will concentrate in areas according to the following factors: (1) educated labor supply; (2) IT infrastructure; (3) regulatory context; (4) political stability; (5) ability to ensure quality; and finally, (6) input costs (labor). At the end of the day, it is the cost-benefit analysis of multinational firms that will dictate the placement of such data hubs.

2.3 Networks and the New Service Economy

Networks, in concert with dropping costs of data storage and processing, have transformed world trade by making services internationally tradable without moving the expertise that provides the service—in other words, by importing information instead of exporting labor.[xv] Inexpensive information storage, processing and transmission now offer the opportunity to circumvent the direct and collateral costs of labor migration by exporting data as a commodity.

Services were once defined by the inextricable proximity of the buyer and provider of services. Even today, economic textbooks tend to define the haircut as the classic example of a service. Either the head had to go to the barber, or the barber had to go to the head. International boundaries, transportation costs, and social dislocation restricted the trans-border trade in services to all but the most high-yield.

The ability of modern service firms to offshore segments of the business process stems from an increasingly segmented value chain. Modern global firms create a value-chain composed of discrete activities that can be geographically dispersed if warranted. According to Raffiq Dossani and Martin Kenney, two analysts of the BPO phenomenon, firms consider a number of internal factors when deciding whether or not to outsource.[xvi] These factors include the separability of the process, the savings or costs from concentrating a function in a single location, and time sensitivity.

The new tradability in services is enabling LDCs to accelerate economic development. For LDCs willing to make the capital outlays in education and technology infrastructure necessary to cultivate a pool of highly-educated workers, this development is "the modern day equivalent of growing oil reserves."[xvii] Historically, service sector growth required costly and time-consuming investments in secondary manufacturing. Now, discontinuities in information technology (e.g., neither fiber-optic cable nor digital satellite transmission demand a prior step – copper wire networks) offer LDCs the chance to "leapfrog" from primary agriculture, over the stage of secondary manufacturing, to the third stage of a service based economy.[xviii]

2.4 The Drivers for Data Export

Offshore business process outsourcing took place initially in the economic context of the "dot-com" and telecommunications boom of the late 1990s. At that point in time, many observers argued that there was a wide disparity between the need for IT professionals in AICs and local supply. This in turn, demanded that American and European firms import the needed labor, or alternatively, export business processes offshore. For example, a 1997 report by the Information Technology Association of America, and a subsequent report prepared by the U.S. Department of Commerce warned of grave shortages for IT workers in the U.S. This culminated in legislation that raised the cap on the number of H1-B visas that could be awarded annually.[xix]

However, the current force driving BPO is not labor shortages (perceived or real), but "the current profitability crisis being experienced by enterprises in U.S. and Europe." Whether or not one agrees that a "profitability crisis" exists, the clear driver at this point

is a need for firms to cut costs. As the economy has cooled off, demand and profit margins have tapered off in turn. Firms eager to increase these narrowing profit margins are now turning to BPO as a means to cut costs. There are also reasons to believe that structurally there will be a long-run supply shortage, and current excess supply is a product of the business cycle.

A similar view was offered recently by economist Stanley Roach of Morgan Stanley. He describes the current driver of offshore BPO, or as he puts it, "global labor arbitrage", as the confluence of three "mega-trends": first, the maturation of offshore outsourcing platforms (in the case of China, driven by massive inflows of FDI)[xxi]; second, the new tradability of services as enabled by IT and the seamless integration of remote knowledge workers that such connectivity facilitates (discussed at length in this paper); and finally cost-cutting imperatives necessitated by excess supply which is likely to prove cyclical.[xxii]

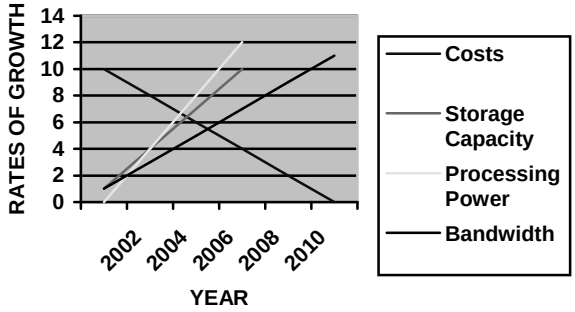
Finally, a future driver may be the political hurdles associated with large-scale immigration as demographic trends in the Western world create a labor shortage. In the U.S., there are 76 million baby boomers (1946-64), and only 46 million Generation Xers (those born between 1965 and 1978). This represents a population shortfall of 30 million in the coming generational transition.

To maximize the cost-quality equation, firms from developed countries will increasingly out-source to companies that can recruit and train personnel from LDCs and deal with the local logistical and legal issues. Moreover, fierce competition in this sub-market for out-sourced and out-located data processing helps to ensure that LDCs will consistently be considered as an attractive destination for information processing.[xxiii]

While the current cost-cutting imperative stemming from excess supply may diminish over time as demand and supply come into balance, this, in combination with the existence of mature offshore outsourcing platforms, and the operational efficiencies enabled by IT, will likely accelerate the trend towards increased reliance on offshore outsourcing by high-wage nations such as the U.S., Japan, and E.U. member states.

3 The Technological Origins of ILD

A mere generation ago, in the era of tape storage, punch cards, and mainframe computers, data was expensive to gather, store, transfer and process. The prohibitive costs of Information Technology limited its use to particularly capital intensive or high value added organizations—primarily vertically integrated manufacturing corporations and governments. IBM was both the dominant provider as well as the quintessential end-user. IT infrastructure was generally firm specific, built to reflect the function and needs of that firm at the time of installation. "Legacy costs" associated with modifying existing IT infrastructure were painfully high. [xxiv]



The rapidly declining costs for information storage, processing and transmission have revolutionized our assumptions regarding the optimal use of data. Since the advent the desktop PC, the LAN, and the Internet, centralized "in-sourcing" has given way to decentralization through both out-locating (remote storage and processing) and outsourcing (sub-contracting to a separate organization.) In addition, modular practices in software and hardware development allow for "extensible" databases and distributed IT infrastructure – a firm's IT architecture is relatively easy to reconfigure for new uses, and there are few restrictions on where components of that infrastructure reside physically. Finally, the increasing use of standard software platforms in corporate information systems has led to a standardization of skill-sets, and therefore increased assurances of business continuity when firms decide to locate a particular piece of the value chain abroad.

4 ILD: The Case of India

India is the paradigmatic case of a Less Developed Country poised to capture the benefits of an ILD strategy. With nearly $34 billion in annual exports, software already accounts for $4.0 billion of this, with $2.8 billion of software exports sent to the United States.[xxv] Call centers and back-office businesses represent an even larger sector than software exports, with staggering projected revenues of $25 billion in 5 years.[xxvi]

4.1 Information-led Development: From Body-Shopping to ITES

India's economy has longed lacked the basic industrial infrastructure to support its population of now over a billion people. India's (1999) $442 billion in total GNP made its economy the world's eleventh largest in total size, but 162nd in per capita income. While other Asian nations successfully transformed from agricultural economies to industrial ones via the "East Asian Tiger" model, India languished for much of the twentieth

century in subsistence agriculture. While most NICs relied on export-led development, India pursued a policy of autarky. From its independence until 1990, it had the highest tariff barriers, both formal and informal, of any country outside the Communist bloc. This "license-permit Raj," had, as one of its recent Prime Ministers stated, essentially missed out on the industrialization.

Two developments brought about a radical transformation in India's posture toward world trade. The first was the financial crisis of the early 1990s, when a crushing debt burden finally forced India to liberalize its tariff and non-tariff barriers. Second, developed countries, particularly the United States, discovered that India had an abundance of highly trained, relatively low-cost, English-speaking IT specialists.

4.2 India's Comparative Advantage

The earliest stages of India's information-led development involved a particular version of the brain drain known as body-shopping. Taking advantage of American H-1B visa laws and the explosive growth in Silicon Valley during the 1990s, Indian firms such as Wipro and Tata Consultancy "body-shopped" thousands of Indian software programmers and other knowledge workers to the U.S. While most of them worked as consultant-technicians, a small but growing number with Green Cards or citizenship launched their own IT start-ups businesses or became heads of American IT ventures.

But body-shopping was fraught with dangers to India's economy. Simply put, body-shopping is merely a milder (because often only temporary) version of brain drain.[xxvii] As many studies have argued, brain drain discourages the governments of poor countries from making investments in collective goods such as education, for fear the rewards of such education will be lost to rich countries when the educated elite migrate.

Fortunately, worries about the Y2K phenomenon accelerated the demand for knowledge workers far beyond what body-shopping (importing) labor could address. It became far easier to export software for Y2K debugging to India. Y2K thus created a whole new range of opportunities for domestic Indian startups and helped restore the returns to India's technological and socio-political infrastructure.

These investments are substantial. India's five major technical institutes, along with other institutions of higher learning turn out over 120,000 software or computer hardware specialists a year. Currently, it is estimated that India has a reserve pool of some 2.8 million IT workers, most of whom are underemployed. They are the mainstay of the ITES industry. And while many of these programmers are profitably engaged in debugging or writing software, the skills of many have not yet been fully leveraged—as with the call center industry.

It should be noted that most jobs in India are on the low end of the value chain. One real constraint is the relatively low number of Ph.D.s in Engineering[xxviii]. This shortage cannot be rectified overnight. To do so will require continued development of the Indian University system, a process with considerable barriers including faculty, lab construction, endowments. Thus, moving up the value chain in software design, semi-conductor fabrication, and similarly technologically complex endeavors is not

accomplished easily. BPO, by contrast, offers a more practical solution for rapid development, as the education requirements are lower and are already fulfilled.[xxix]

4.3 The Indian Call-Center Industry

As a location for a highly visible IT-enabled service such as call-centers, India's first advantage is of course, significantly lower wages relative to the skill levels of the workers. A recent survey of the Indian call-center industry found that call center operators tend to have above average levels of education—9 percent of the employees had MBA degrees.[xxx] (By comparison, customer service representatives in the United States tend to have below-average levels of education.)

But cost is not the only advantage out-sourcing to India offers Western firms. One is the twelve-hour time zone differential relative to the United States, for example. As Americans are returning home from work and are picking up the phone to discuss a credit card charge, Indians are just arriving for work in the morning. Assuming that most MNCs maintain customer support in their home country as well, customer service can operate around the clock with comparatively little disruption to customer or provider.

Though some have characterized the call center as the sweat-shop of the 21st century, the experience of India contradicts this. At three to five thousand dollars for a typical CSR, wages are indeed about 70% lower than they are in the United States. But these workers earn significantly –even vastly-- more than they could earn by doing other work in India: the per capita GDP of India is only $420 per annum. Supervisors earning seven or eight thousand dollars per annum are even better placed. Moreover, many workers in the call center industry appreciate the opportunity to distinguish themselves in one of the rare sectors of the economy to employ meritocratic performance assessment. Many see the call center industry as a growth opportunity, where they can learn the operations of a western-style business from the inside and eventually establish their own out-sourcing firm.

Finally, there is the issue of labor supply. In many parts of the U.S. there are chronic shortages of workers to fill call center vacancies, as it is perceived by many as a "dead-end" job. This in turn, also leads to far higher rates of attrition for this sector in the U.S., whereas attrition rates for Indian call-centers are on average below 4%[xxxi]. While the average call center size in the U.S. is between 300 to 400 employees, Indian call centers tend to be significantly larger.

4.4 Leveraging ITES

While India's initial "value proposition" was once exclusively cost, it is rapidly becoming quality, as India's firms migrate from simple processes, such as data entry and email consolidation, to much more complex processes, including credit card approvals, integrated CSR, insurance claims, and accounting. Beyond this, Indian firms are beginning to leverage their expertise in ITES to break into such highly profitable areas as animation and multimedia. Indian IT firms are moving laterally into pharmaceuticals and pharmaceutical research.

Once an ITES infrastructure is in place, it can be leveraged for many purposes. GE Capital, for example, is the world's largest non-bank bank and the largest single foreign operator of ITES in India. Through its presence in India, it is helping the State Bank of India become the largest credit-card issuer in the country. This requires not only a technological infrastructure, but a fully developed credit reporting system that depends heavily on the free flow of information about consumer spending and payment patterns. Such a system will be unlikely to develop if a data regime modeled after the EU emerges in India, particularly one that includes provisions akin to the draft of the EU Consumer Lending Directive.[xxxii]

4.5 *From Opportunity to Strategy: The Indian Government's Response*

As India analyst Joydeep Mukherji observes, "the political impact of IT exceeds its direct economic impact."[xxxiii] ILD has become "the symbol of India's drive to modernize," and represents India's greatest success since the Green Revolution in agriculture during the 1960s. ITES has already created a small but burgeoning middle class for India. This group no longer considers the previously unheard-of growth rate of 5% per annum sufficient. They have pressed for, and received, important and sweeping reforms in India's previously outdated public policies. By 2005, full intellectual property laws will be in place. Already, corporate law now permits hostile takeovers. Import tariffs on IT products have been eliminated, and an income tax holiday on ITES has been declared. The Indian government's stated intention to make India a "knowledge super power" in the years ahead seems increasingly plausible, if not inevitable.

5 ILD in Other LDCs

An implicit recognition of the ILD-model is already widespread. Many governments in LDCs have directed significant expenditures towards measures to create IT infrastructure and a pool of trained knowledge workers. By doing so, they hope to attract outsourcing and out-location by Western multinationals, while at the same time nurturing their own nascent IT industries. The following chart summarizes the status of preconditions necessary for ILD as present in three representative LDCs: Malaysia, Ghana, and the Philippines. The Philippines in particular, looks extremely well poised to follow the Indian model given widespread English fluency and widespread computer literacy.

	Government Incentives	**Education Infrastructure**	**Data Export Demand**	**Technology Penetration**
Malaysia	Multimedia Super Corridor – massive state funded technology incubator. Tax incentives and subsidies	MSC – Multimedia University/ RM205.5 million ($) for the computerization of schools/ RM72.3 million for "smart school" in their 2002 budget	18,000 "Knowledge Work" Jobs Created**.** 42 foreign firms involved with project.	*Economist* Newspaper Ranks Malaysia 33rd in terms of "e-readiness."
Ghana	Ghana's government has recognized IT as a key component of making Ghana a middle-income country by the year 2020.	Three out of Ghana's five universities now have degree-level IT programs.	Ghana office of U.S.-firm ACS-BPS provides remote data entry of medical records for insurance giant Aetna.	Internet use increased from low base by 2500% between 1995 and 1998.
Philippines	Department of Science and Technology announced a 20-year development plan ICT as one of main anchors.	Widespread fluency in English and technological literacy.	Approximately 8,000 Filipino firms engaged in outsourcing for Western firms.	Low penetration of PCs (1.69% as of 1999) and the stigma of rampant electronic piracy.

However, it should be noted that data restrictions in India could stymie a burgeoning submarket in which Indian BPO firms with excess demand for their services, subcontract to even cheaper locations (including republics of the former Soviet Union.) Countries such as those listed above could clearly suffer an indirect negative impact from such an outcome in India.

6 Prognosis

While this paper has focused on the economic benefits accruing to several emerging markets utilizing a program of information-led development, little has been said about the rationale that would cause them to adopt an obviously self-defeating EU-style data protection regime. Despite the lack of a sound economic rationale, lawmakers in many emerging markets -- including India, the model for ILD – are giving serious consideration to implementing just such a data protection regime.

6.1 ILD and Emerging Markets

Generally, emerging markets considering EU-style data regulations are contained in one of two clusters. The first cluster of nations is those nations with economic development as their primary concern. Such nations may harbor mild concerns for individual privacy, but rank such concerns relatively low given more pressing needs for basic infrastructure build-out, foreign investment, and the development of capital markets. This cluster includes countries such as India, Ghana, Costa Rica, Malaysia and others.

One possible scenario with respect to this group of nations is a sort of inverted "Race to the Bottom."[xxxvi] In such a case, each of these emerging markets view themselves to be locked into hyper-competition with the others, scrambling to provide the most attractive incentives for foreign investment. As a result, the policy actions of one nation – particularly a larger or more successful nation – are emulated by all other nations in this group. In many cases, the policies implemented by the emulators are likely to be even more extreme than those implemented in the inaugural case.

Given multiple iterations, once a policy path has been embarked upon, it could catalyze a vicious cycle of counter-policies from competing states, all intended to stimulate foreign interest. *Ironically, the outcome could quite possibly be the opposite*. For example, should LDCs implement data regulations in line with the European model, they may diminish their comparative advantage in data processing, as they increase the compliance costs associated with data export to that nation. These cost increases could result in a reduced level of FDI or outsourced data processing as many of the marginal benefits are reduced. As mentioned earlier, these margins are much more modest then wage differentials suggest when viewed in the context of total project cost.

The peculiar irony of this outcome is that this scenario *does nothing to protect the data of European nationals*. The object of data protection laws are of course the security and possible uses of the data collected about the citizens of the nations in which they are enacted. Even if LDCs are compelled to adopt a standard of data protection that meets the rigors of the EU's "adequacy" clause, these laws will do little to ensure protection of European nationals whose data is processed elsewhere. A more rational approach

would focus on contract enforcement and the prevention of abuses of such data, rather than imposing standards on foreign data collectors under the rubric of harmonization.

6.2 ILD and Emerging Markets: Central Europe

These phenomena are also likely to affect a second cluster of emerging markets. Specifically, this group is comprised of those nations in the process of accession to the European Union. This group differs from the first cluster in that most of these nations have achieved a relatively more advanced stage of economic development. As a result, concern for data privacy in these countries is given more significance than in those less developed nations.

These nations are in the process of harmonizing their body of national laws with those of the European Union, including their national data privacy and data security provisions. In the process of harmonization, they are likely to discover that their own continued economic development requires greater access to personal information, and far less stringent restrictions on how personal data is collected, stored, and used than is the case in the more developed member states of the European Union. Such nations are likely to pursue exemptions to the Data Protection Directive as a condition of EU membership, or are likely to build coalitions with extant EU member states that have a similar interest in seeing the Data Protection Directive amended. The stakes for nations in this cluster – the development of a robust consumer credit market, interest rates on home mortgages, the viability of small and medium enterprises – are enormous. As a result, the issue of data restrictions will likely be a thorny one as such countries struggle with the accession process over the next few years.

6.3 Unintended Consequences of the EU Data Protection Directive

Finally, it is worth considering this issue in the broader context of economic development. Traditionally, European Union member states are far more generous than is the United States when it comes to the allocation of foreign aid to developing countries. According to the World Bank, in 2000 only 0.1% of the GDP of the United States was consumed by foreign aid, while the European Union average was more than twice that at 0.24% of GDP. Indeed, several EU member states provide foreign assistance in excess of 0.7% of GDP (Netherlands, Denmark, Sweden), while others (Ireland, Finland) are committed to reaching this target level of giving by 2015. [xxxvii] *Ironically, the European Union Data Protection Directive could be working at cross-purposes with the foreign aid programs administered by individual member states.* This is so, because as discussed above, the EU Data Protection regime will hinder the ability of LDCs to continue to employ an ILD growth strategy. This unintended consequence would result in harm to the progress of the neediest nations without offering any additional privacy protection to EU citizens. In the final analysis, this may be the worst of all worlds.

[i] "The Cusp of a Revolution: How Offshoring Will Transform the Financial Services Industry." Deloitte Research. 2002. <http://www.dc.com/pdf/offshoring_financial.pdf>
[ii] Deliotte Research summarized by Bruce Bartlett, National Center for Policy Analysis. <http://www.townhall.com/columnists/brucebartlett/bb20030826.shtml>
[iii] Swire, Peter. "Of Elephants, Mice, and Privacy: International Choice of Law and the Internet." International Lawyer. 1998.
[iv] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995. <http://europa.eu.int/comm/internal_market/privacy/law_en.htm>
[v] Op. cit.
[vi] Swire, Peter P. and Litan, Robert E. *None Of Your Business, World Data Flows, Electronic Commerce, And The European Privacy Directive* Brookings Institute. 1998.
[vii] Conversation with Clair Brown, Professor of Economics, UC Berkeley.
[ix] For a thoughtful and extensive discussion of the idea of LDC "leapfrogging" see "Life at Work in the Information Economy." World Employment Report 2001. International Labour Organization <http://www.ilo.org/public/english/support/publ/wer/index2.htm>
[x] Although it should be noted that some speculate that human capital formation subsidies probably tend to flow in the net from the United States to the developing world, not the other way around. This because of the high number of foreign nationals receiving educations within U.S. borders—educations that are often funded through public sector sources. Conversations with Professor Clair Brown, UC Berkeley.
[xi] Friedman, Thomas. "General Electric, not General Powell". New York Times. August 11, 2002.
[xv] Primo Braga, Carlos Alberto, "The Impact of the internationalization of services on developing countries." *Finance and Development*, v. 33 (March, 1996).
[xvi] Dossani, Rafiq and Kenney, Martin. "Went for Cost, Stayed for Quality?: Moving the Back Office to India." November 3, 2003.
[xvii] Sadanand Dhume, "From Bangalore to Silicon Valley and Back: How the Indian Diaspora in the United States is Changing India." In Alyssa Ayres and Philip Oldenburg, eds., India Briefing. Armonk, NY: M.E.Sharpe, 2002.
[xviii] An additional and underappreciated consequence is linked to current account balances. As nations such as India develop, and the average wage level increases, consumption patterns will begin to resemble those of the West. This should result, ultimately, in larger export markets for U.S. goods and services. In addition, dollars used to purchase BPO services must be used at the end of the day to buy U.S. goods and services. Otherwise the net effect is a foreign subsidy of U.S. economic activity.
[xix] http://www.cra.org/reports/wits/chapter_1.html
[xxi] Roach, Steven. "The Global Labor Arbitrage." October 6, 2003. <http://www.morganstanley.com/GEFdata/digests/20031006-mon.html#anchor0>
Roach also points out that "fully 65% of the tripling of Chinese exports over the past decade -- from US$121 billion in 1994 to US$365 billion in mid-2003 -- is traceable to the outsourcing dynamic of Chinese subsidiaries of multinational corporations and joint ventures."
[xxii] Ibid.
[xxiii] The robust sub-market for LDC outsourcing is comprised by firms such as ACS-BPS, and Sykes Enterprises.
[xxiv] Chart Source: IBM
[xxv] Newshour with Jim Lehrer, "Dialing for Dollars", November 5, 2002.
[xxvi] Op cit.
[xxvii] Binod Khadria, The Migration of Knowledge Workers. New Delhi: Sage Publications, 1999.
[xxviii] For this point, we are grateful to Professor Ashish Arora of Carnegie Mellon University and Professor Rafiq Dossani of Stanford University.
[xxix] See discussion in Robert C. Leachman and Chien H. Leachman, "Globalization of Semiconductors: Do Real Men Have Fabs, or Virtual Fabs?" Chapter 5 of Martin Kenney and

Richard Florida, eds., Locating Competitive Advantage, Stanford: Stanford University Press, forthcoming.

[xxx] Sharma, Dinesh C. "Indian Call Centers Face Employee Exodus." CNET News.com. August 27, 2003.

[xxxi] Dossani, Rafiq and Kenney, Martin. "Went for Cost, Stayed for Quality?: Moving the Back Office to India." November 3, 2003.

[xxxii] As has already been documented in an earlier Information Policy Institute study, certain types of data restrictions on credit histories lead to a reduction in access to credit and increased cost. Turner, Michael A. "The FCRA: Access, Efficiency, and Opportunity." Information Policy Institute. 2003. <www.infopolicy.org>

[xxxiii] Joydeep Mukherji, "The Indian Economy: Pushing Ahead and Pulling Apart," in Ayres and Oldenburg, *op. cit*.

[xxxvi] Traditionally, the notion of a "Race to Bottom" involves countries (or states in the U.S.) which *reduce* the regulatory barriers to investment, or taxes and tariffs, in an effort to lure investment dollars. It is a notion commonly invoked by critics of globalization.

[xxxvii] "London Issues Call to Action at Global Child Poverty Conference." March 2, 2002. <http://www.europaworld.org/issue24/londonissuescalltoaction2301.htm>