

## **The New Economy: End of the Welfare State?**

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## **Abstract**

The New Economy transforms the business of and relationships between consumers and firms by changing the boundaries of products and marketplaces, by innovating new ways to transact in goods and services, and by enabling whole new activities that depend on the network of information and communications technologies that bind the world ever closer together. Together these changes highlight the economics of networks and of information, both of which create tensions between the global commercial reach of firms and customers and the local jurisdiction and authority of law and policymakers.

Just as the New Economy is changing the commercial landscape, so too is it affecting the ‘business’ and ‘relationships’ of governments and policymakers. This essay will trace through the forces of the New Economy on two areas—fiscal systems and information privacy. These are two of the most challenging policy arenas and the ones where the archetypal Welfare State is most applicable. That is, in the archetypal Welfare State, high tax revenues fund generous public services and policymakers take a very activist role in governing the lives and environment of their citizens, including with regard to personal data.

For fiscal systems, I conclude that transaction-based tax regimes will be stressed by the forces of the New Economy and will need to evolve in response to the more complex and global nature of production. But the notion of “the death of taxes” is false and the government can still play a significant role in providing for ample public services. In the area of personal information, I conclude that there are several possible sources of market imperfections, which allow for welfare-enhancing policymaker intervention. To ensure the best outcome, such intervention must preserve the private sector’s incentive to innovate, even as government should be an advocate for citizens ignored by the market.

Therefore, the New Economy does not portend the end of the ability of the State to play a significant role in enhancing the well-being of its citizens. But, it does mean that the Welfare State must change the way it operates, the way government sets policies on behalf of its citizens, and the way that citizens respond to the marketplace.

The New Welfare State for the dynamic environment of the New Economy will be characterized more by incentives and responsibilities than by rules and outcomes. In this Welfare State, policies should focus on enabling transformation to achieve superior productivity and growth, not on avoiding change by moderating possibilities and regulating outcomes. Some might see in this redirection the end of the Welfare State as they know it.

## Introduction

The New Economy transforms relationships between consumers and firms by changing the boundaries of products and marketplaces, by innovating new ways to transact in goods and services, and by enabling whole new activities that depend on the network of information and information technologies that bind the world ever closer together. Together these changes highlight the economics of networks and of information, both of which create tensions between the global commercial reach of firms and customers and the local jurisdiction and authority of law and policymakers.

Policymakers view this dynamism with differing degrees of urgency and dismay. Urgency, because of the potential for large productivity gains that will yield higher standards of living. Dismay, because the transformative forces that generate these New Economy gains may, at the same time, undermine policymaker's ability to do the job of government.

Just as the New Economy is changing the commercial landscape, so too is it affecting the 'business' and 'relationships' of governments and policymakers. What is the "business" of government? Procurement, raising and redistributing taxes, and providing public services are a few. What about the 'relationships' of government? Among other relationships, government sometimes is the advocate for citizens whose voices may be ignored by firms (as in minority interests) and sometimes is the advocate for society's future (as in pollution legislation). The dynamism of the New Economy significantly affects the business of government, and the forces of the New Economy bring new challenges and dimensions into government relationship with its citizens.

A particular set of fiscal tools and economic outcomes seem to characterize the business and relationships between government, firms, and citizens in the Welfare State. That is, in the archetypal Welfare State, high tax revenues fund generous public services and policymakers use rules to govern and moderate the lives and environment of their citizens.

This essay will trace through the forces of the New Economy on two dimensions of government business and government relationships: (1) Tax and expenditure systems, and (2) The issue of privacy and use of personal information. New Economy forces are deeply affecting these areas and they are ones where the characteristics of the Welfare State are most prominent. Can the archetypal Welfare State survive the New Economy?

For tax and expenditure systems, I conclude that transaction-based tax regimes will be stressed by the forces of the New Economy and will need to evolve in response to the more complex and global nature of production. But governments still will be able to raise revenues to finance public expenditures, and will continue to be able to differentiate themselves by level of taxation and extent of expenditure: homogenization of tax rates or of public services is not inevitable. On the other hand, the extent to which public expenditures focus on moderating outcomes versus supporting transformation likely will have to change in order to enjoy the productivity gains of the more dynamic New Economy.

With regard to privacy and the use of personal information, I conclude that there are several possible sources of market imperfection, which allow for welfare-enhancing policymaker intervention to ensure proper functioning of the marketplace for information and privacy. However, the type of intervention is extremely important. In a

technologically dynamic market, intervention must preserve the private sector's incentive to innovate. Thus, whereas government should be an advocate for voices ignored by the market, enforcing where necessary, a rules-based approach that yields a homogeneous outcome is less efficacious.

Therefore, the New Economy does not portend the end of the ability of the state to play a significant role in enhancing the well-being of its citizens. But, it does mean that the government must change the way it sets policies on behalf of its citizens in order to change the way that citizens respond to both policies and the marketplace. Some might see in these changes the end of the Welfare State as they know it.

### **The New Economy: ICT Investment, New Markets, and Transformation**

Information and networking technologies, and increasingly the information itself, are key drivers of the New Economy. But, it is the response of the market participants to transform their activities that generates the gains, not the technologies alone. That is, information technologies (computers, hardware, and software) have been used to process numbers, create databases, and enhance corporate operations for quite some time (at least in the United States). And, firms have collected and processed information about prices, preferences, inventories, and inputs to improve internal operations and sales. But most of these technologies and information have been kept internal to a firm. The revolution of the New Economy builds on and extends information technologies to give global reach, interoperability, and accessibility to the firms, consumers, and government.<sup>1</sup>

#### ***New markets and new “bundles” of product, geography, time, and information***

The structure and capabilities of the Internet and information and communications technologies reduce frictions in the marketplace in the three dimensions of time, geography, and information. Production is more globalized, products are tailored to the specific needs of the user, and are delivered much more quickly. Consider Dell.com the on-line, just for you, and just in time production. Or, consider interactive customer service in the native language of the caller, available 24 hours a day, and responding to specific questions associated with the particular order. The *Financial Times* packages its materials in several different ways, updates it continuously for different time zones, links to stories in other sources, and transmits through several distribution channels to satisfy the information needs of specific recipients. Internet access means that artisans in remote villages in Vietnam can sell into the global market. Business-to-business exchanges and auctions widen the range of participants, improve price revelation, and allow more timely purchase and delivery of parts and services.

The global New Economy marketplace increasingly creates product “bundles,” where a so-called “final good (or service)” is now bundled into and priced uniquely for time, location, shopping, and delivery method. Airlines have used this strategy for pricing seats for some time, as have package delivery services, such as FedEx. The Internet and ICTs allow such bundling to become much more prevalent, which at the same time creates more market niches for firms to occupy. For example, some Bloomberg clients

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<sup>1</sup> See Carl Shapiro and Hal R. Varian, *Information Rules: A Strategic Guide to the Network Economy*, Boston: Harvard Business School Press, 1999.

pay for real-time stock prices; others get that information for free, but 20 minutes delayed; while a third group pays for a time series of the historical data. The customer needs are different, so Bloomberg bundles its information in different ways, creating more value to both the firm and the customer. Or, some people buy shirts from LandsEnd.com online and some from Nordstrom in the shopping center, not because the shirts are different, but because preferences for touching, customer assistance, convenience, and other factors, such as shopping-as-entertainment, matter. The shirt is just one part of the product bundles that is being purchased. Even for intermediate good producers, such as industrial supplies, the Internet and ICTs enhances this ability to bundle and use time, geography, and information more effectively.

What with bundling of tangibles and intangibles and strategic alliances around the globe, it is increasingly difficult to determine exactly where (in a geographical sense) or when (in terms of the stage of production and bundling) value is created. Product bundles can be offered through firms that can locate anywhere, whose locations can change quickly, and whose ultimate residence may be hard to track down. Even tangible merchandise purchased at a point in time and at a particular location may only be identified by the delivery destination of record, not the ultimate user. With a bundle characterized by a digitized and downloaded transaction, neither the origin point nor the ultimate user may be determinable (e.g. digital music). And, some transactions will take place intermittently, through an intermediary, and involve the ‘rental’ of intellectual property (e.g. use of software via application service providers). These issues have important implications for tax systems where jurisdictions often are bound by political or geographic borders, rather than by commercial or economic relationships.

The enhanced role for information in the New Economy also creates new policy challenges. With the Internet, information increasingly resides between the originator and the user, is used interactively (consider the examples of “cookies” or of application service providers), and is aggregated into databases. Both user and originator are key to having this wealth of information and using it to transform economic activity to generate greater welfare. But the user of the information may have greater economic power in the relationship than the creator of the information. Moreover, the collection of information that is the database has the economic characteristic of a “public good”. As is well known from economic theory, public goods may open the door for explicit public policy intervention so as to properly price or internalize the difference between the social and the private value of the activity.

### ***Economic gains come from transforming activities, not just ICTs***

The lower frictions to using time and geography combine with the information and network characteristics of the Internet marketplace to allow more ways for business to create value. Firms can focus on which part of the value-added chain that they do best and outsource other parts to subsidiaries or strategic allies anywhere on the globe. Moreover, more stages of production can be digitized (blueprints and software production, for example) where “assembly” and the delivery of value are via the network itself. From aircraft to architectural designs, more production is being done on the Internet by international teams. Without these transformations of the scope, pace, and location of economic activity, less benefit will come from the Internet.

Consider table 1 which shows a decomposition of labor productivity growth over the 1990s for the United States and Australia.

**Table 1: Measures of productivity growth: 1990-95 compared to 1996-99**

Contribution of Information Technology to Productivity Growth				
	Australia		United States	
	1991-1995	1996-1999	1991-1995	1996-1999
<b>labor productivity growth</b>	2.1	4.1	1.5	2.6
contribution from:				
Information technology	0.9	1.3	0.5	1
Other capital	0.4	0.6	0.1	0.4
<b>multifactor productivity growth</b> (e.g. transformation)	0.8	2.2	0.5	1.2

Source:  
Gruen, Reserve Bank of Australia Bulletin, Feb 2001, table 1 page 68

In both economies, labor productivity growth nearly doubled between the first and second half of the 1990s. In both economies, ICT investment is a large part of the story, with about one-third of labor productivity growth in the second half of the 1990s coming from investment in ICTs. That investment story is often what other policymakers see and want to emulate, but it represents only the beginning of the productivity story.

The more important driver of the gains of the New Economy is how individuals, firms, markets, and governments using that technology transform what they do in that dynamic environment. In both economies, half of the increase in labor productivity comes from increased multifactor productivity. Multifactor productivity (MFP) measures how the economy uses its existing resources to produce more. An increase in MFP reflects the outcome of doing things differently in an economy, in order to get more output out of the same or fewer inputs (capital, equipment, labor). In other words, MFP is a proxy for restructuring and transformation. Going forward, it is the step-up in multifactor productivity that will enrich the economy and raise living standards, not just capital deepening represented by ICT investment in hardware and software.

Dynamic transformation in the New Economy along with the importance of investment in ICT capital suggests the need for flexibility in business entry and exit, changes in job tenure and nature, and constant skill upgrading. These issues have important implications for the scope and method of government expenditures and rules for unemployment and pension benefits, on the one hand, and education and training, on the other.

## The Welfare State: Expenditures and Rules to Moderate Outcomes

There is a huge literature on what the Welfare State is, which cannot adequately be reviewed here, and which, in any case, is not monolithic in its characterization of what *is* a welfare state. However, in considering this literature in light of the essential ingredients of the New Economy, two questions emerge:

- ✍ Transformation is integral to the economic gains of the New Economy. How do tax and expenditure systems of the archetypal Welfare State interact with the challenge of economic transformation?
- ✍ Information is an essential component of the New Economy, yet it presents the policy challenge of market imperfections. How does the archetypal Welfare States deal with market imperfections?

As a general characterization, the policies of the Welfare State focus on ensuring stability for workers and the economy, rather than on encouraging transformation of business and activities. To this end, are regulations on hiring and firing, as well as for business entry and exit. Skill training for existing jobs may be excellent, but the incentive for taking up new skills for new businesses is limited by the fact that new businesses are only slowly being created. The replacement wage under the unemployment regime is high, enabling extended periods of unemployment. Public sector employment is generally large, and may be used as a counter-cyclical tool. Pension systems are generous, and the incentives to work once the pensionable age is reached are minimal. Access to education and health care comes through universal provisioning by the government. Collectively, these public sector policies are expensive, requiring substantial tax revenues to support them. Moreover, the tax system plays a key role in the redistribution of income. So, the regulatory regime, the expenditure regime, and the tax regime all play roles in achieving the objective of the Welfare State of a high degree of income equality and social cohesion. Individuals in the Welfare State vote their preferences for both the tools and the outcomes as part of the political process.

With regard to problems of market imperfection, the archetypal Welfare State intervenes through rules and regulations, rather than emphasizing market-based incentives to close the gap between private and social measures of cost (or benefit). The belief is that, if the objective is clear, rules and regulations to target the objective will reach it with greater certainty than leaving the outcome to the chance or interpretation of the marketplace. Moreover, market-based incentives may be differently applied across classes of workers and firms, which may contravene the overall objective of social equality. Once again, individuals in the Welfare States vote their preferences for both the tools and outcomes as part of the political process.

Against this extremely simple backdrop description of the Welfare State, the next two sections of the paper consider how the New Economy forces affect policymakers in the two areas highlighted here: fiscal systems and treatment of personal information. The

market-incentive system, as exemplified by United States policies, and the archetypal welfare state, as exemplified by European Union policies, are reviewed and compared.<sup>2</sup>

## **Evolution of Tax and Expenditure Systems in the New Economy**

Global reach, value creation through information, product ‘bundling’ and production alliances—key attributes of the New Economy—put pressure on existing tax and expenditure systems. Policymakers can ignore or try to offset these pressures. But, a more proactive approach, which is the one being taken by the private sector in transforming its own business activities, is to consider how fiscal systems might need to evolve.<sup>3</sup>

Global reach implies a great overlap of national jurisdictions. International coordination of tax policies, though not necessarily homogenization of tax rates, will likely be necessary in the future. Policymakers need to consider carefully how best to target the tax (and other parts of the fiscal) system to meet revenue needs, citizen needs, and any social objectives of the redistribution of income. In the end, the forces of the New Economy may imply a fiscal system more focused on individual income taxation than on taxation of transactions or the corporation.

Value creation is increasingly complex. Are the product ‘bundles’ goods or services, both or neither? Do sales generate business income or do leases generate royalties? Both indirect and direct tax systems that depend on knowing and distinguishing the “what, who, where, and how” of transactions will fit poorly within the emerging reality of economic activity.

Greater mobility of firms and activities may make transactions more difficult to trace (or make the cost of doing so unrealistic or the erosion of privacy unacceptable). This puts a greater premium on increasing the incentives for voluntary compliance and reducing the incentives for forum-shopping both within and across jurisdictions.

On the plus side, the innovations of the Internet have great potential for reducing the cost of tax administration and for increasing the ability of the government to serve its constituents. Moreover, since the New Economy promises higher productivity growth, tax revenues could rise without increased tax rates. In the end, the same level of social expenditures could be financed with lower tax burdens on account of the greater efficiency of fiscal administration and higher potential growth.

Yet, the current response by policymakers is to hold on to the status quo: Why? There are immediate issues. Many tax systems depend on indirect taxes, such as sales taxes, value-added taxes (VAT) or goods and services taxes (GST) to raise a substantial share of government revenues.<sup>4</sup> Policymakers are concerned about the potential erosion

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<sup>2</sup> The choice of the United States and the European Union is designed to clarify the economic issues through use of specific example. It is not the objective of this paper to be the definitive description of either US or EU policies.

<sup>3</sup> This section draws on Chapter 6 of *Global Electronic Commerce: A Policy Primer* and on “Transatlantic Issues in Electronic Commerce,” translated into Italian in *Beyond Seattle: A New Strategic Approach in the WTO 2000*, edited by Isabella Falautano and Paolo Guerrieri “IAI Quaderni” no.11, Rome, October 2000. The English version is available at [www.ije.com](http://www.ije.com).

<sup>4</sup> In the OECD, all the countries except the United States have or will soon have a VAT/GST system. In the countries of the European Union (EU), VAT revenues account for about 30 percent of total tax

of their tax revenue right now.<sup>5</sup> Firms and individuals want to know how much they need to pay and to whom. So, most analyses of New Economy and tax tend to focus on the specifics of how to implement existing tax systems in a changing environment.

### ***What and how to tax? The US and EU compared***

Various domestic and international groups have been discussing how to apply tax laws to Internet and e-commerce transactions.<sup>6</sup> The most challenging areas are sales and value-added taxes, particularly when tax treatment of goods and services differs, when digitized transactions and activities cloud the determination of permanent establishment, and when the “character” of income earned (e.g. business profits vs. royalty income) is unclear. Yet the challenge is not only the treatment of domestic transactions. What happens when transactions cross international borders and the tax treatment is different?<sup>7</sup>

Both the US and the EU have been struggling with how to apply sales and value-added taxes to e-commerce transactions, both within and across borders.<sup>8</sup> Neither body fully recognizes that decisions taken in the domestic arena have implications for cross-border application of these types of taxes. Inconsistent tax treatment of transactions between the US and the EU, and within each country as well, already has surfaced.

In the United States, when the Congress passed the Internet Tax Freedom Act in 1998 (which kept domestic Internet transactions free from any “new” taxes for three years but did not revoke existing sales or use taxes), it mandated review of the

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revenues. In the US states, sales and goods taxes account for about 12 percent of total revenues, but range to much higher percentages in some states.

<sup>5</sup> Efforts to measure the potential loss of tax revenue are difficult because of the dynamic response. For the United States, Austan Goolsbee and John Zittrain, “Evaluating the Costs and Benefits of Taxing Internet Commerce,” *National Tax Journal*, vol 52 no. 3, September 1999, pp 413-428 calculate a loss over the next few years of less than 2 percent of sales tax revenues. For the full range of countries around the world, Susan Teltscher, “Revenue Implications of Electronic Commerce: Issues of Interest to Developing Countries,” mimeo, UNCTAD, April 2000, also finds loss of tax revenues of less than 1 percent overall, although the figure is higher for some countries.

<sup>6</sup> Among international organizations, the OECD membership, in conjunction with non-member governments and private sector groups representing business and tax accountants, has been analyzing since 1997 how electronic commerce might impact international and domestic taxes. The outcome of that effort was the “Tax Framework Conditions” which reaffirms five key principles that guide governments generally in the application of taxes within the overall regime: neutrality, efficiency, certainty, and simplicity, effectiveness and fairness, and flexibility. See [http://www.oecd.org/daf/fa/e\\_com/e\\_com.htm#top\\_e\\_commerce](http://www.oecd.org/daf/fa/e_com/e_com.htm#top_e_commerce).

<sup>7</sup> See The OECD Model Tax Convention, which is a blueprint that many countries have used as a framework for bilateral tax treaties. It apportions tax responsibility and revenue so as to avoid double taxation of income earned through foreign investment. An overview is available at <http://www.oecd.org/daf/fa/treaties/treaty.htm>. See also:

[http://www.oecd.org/daf/fa/material/mat\\_07.htm#material\\_Model](http://www.oecd.org/daf/fa/material/mat_07.htm#material_Model) for the most recent information on the articles of the model convention.

<sup>8</sup> The VAT is a tax on supplies of goods and services applied at all stages of the production process. It is charged by the supplier and then credited by the users of the inputs in the course of doing business. Each transaction leaves an invoice path, so the VAT system essentially relies on “double-entry” book-keeping by VAT-registered businesses on both sides of a transaction. The final consumer is not a VAT-registered entity, so ultimately pays the tax. The US sales tax system is different in that final users (usually retail) pay the taxes, principally only on tangible property (with exceptions) and usually not on services. Business inputs generally are exempt from the tax.

implications of electronic commerce for domestic sales taxes. A majority of members of the Gilmore commission proposed that digital products downloaded over the Internet (including software, books, or music) should not be taxed. In the interests of tax neutrality, their tangible equivalents also would be tax exempt. This represented a “harmonizing down” approach, which could generate pressures for lower sales tax rates overall in order to make more consistent the treatment of purchases over the Internet and through other means for products not explicitly exempted.

The Commission opinion has implications for taxing authority and tax jurisdiction. Indeed, one objective of the Commission’s proposal was to encourage states and localities to simplify their own structures and reduce the myriad state and local taxes (some 30,000), which are both administratively cumbersome and encourage tax-strategizing behavior.<sup>9</sup> Implications at the international level were not addressed, since the Commission did not have the mandate to address cross-border issues.

In contrast to the United States, the EU tax authorities are trying to draw a bright line between goods and services purchased over the Internet, and to a greater extent than the United States, already have captured these transactions in their tax orbit. All electronic transmissions (those under the general term “soft goods”, such as software, books, or architectural drawings) have been classified as services which, therefore, should be taxed at the appropriate VAT rate.<sup>10</sup> Whereas the EU ruling would seem to simplify and increase certainty in the tax environments, there are many different rules governing applicable location and rates for taxing services so the simplicity is part illusion. Moreover as the creation of product bundles becomes more complex, the bright line fades.<sup>11</sup>

Unlike the United States, which has not addressed the cross-border issue, the European Union has proposed that businesses both within and outside the European Union apply, collect, and remit VAT taxes on products (including software, books, and music) purchased or downloaded from the Internet by non VAT-registered entities.<sup>12</sup> The European Union has suggested that non-EU firms should establish their tax identity within an EU locality in order to determine which rate of tax to charge when selling such products business-to-business.<sup>13</sup> In essence, using the argument of tax neutrality, the European Union is “harmonizing up” by applying service-VAT rates to sales of all digital products and is proposing that non-EU firms become EU firms to establish a tax presence even if they do not need to establish such a presence for any other economic reason. This

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<sup>9</sup> The National Governors Association is examining how to simplify their sales and use taxes so as to apply computer technologies to tax administration. See Streamlined Sales Tax project [http://www.nga.org/nga/newsRoom/1,1169,C\\_PRESS\\_RELEASE^D\\_1067.00.html](http://www.nga.org/nga/newsRoom/1,1169,C_PRESS_RELEASE^D_1067.00.html), December 22, 2000.

<sup>10</sup> For an overview of the treatment of e-commerce transactions see <http://europa.eu.int/scadplus/leg/en/lvb/l31041.htm>

<sup>11</sup> For a different view, see “Taxation of E-Commerce: Persistent Problems and Recent Development,” Stefan Bach, Markus Hubbert, and Walter Muller, in *Vierteljahrshetze zur Wirtschaftsforschung*, 4/2000, pp 657-678.

<sup>12</sup> See “Europe Plans to Collect Tax on Some Internet Transactions” by Edmund L. Andrews, *New York Times*, March, 2, 2000; <http://www.nyt.com/library/tech/00/03/biztech/articles/02tax.html>. The amount to date of “lost” tax revenue from such cross-border sales appears by all accounts to be miniscule. Of greater import, it appears, is the argued disadvantage of bricks-and-mortar stores vis-à-vis on-line merchants who have not had to collect VAT.

<sup>13</sup> Document of the EU commission regarding electronic commerce and indirect taxation: <http://www.europa.eu.int/scadplus/leg/en/lvb/l31041.htm>;

extraterritorial application of tax authority is a key jurisdictional challenge posed by digital transactions in the New Economy.<sup>14</sup>

All told, the higher information content of bundles created in the global Internet marketplace will highlight disparities in tax systems and jurisdiction. The rates to apply to transactions, the jurisdiction to collect the tax, the party to remit the tax, and the allocation of income to different governments will be increasingly difficult. Tax systems have been static, founded on rules formed incrementally by case law or infrequent multilateral negotiations. Continuing with this approach will yield an increasingly rules-driven and fragmented system that invites evasion and forum-shopping, is costly to administer and is distortionary, and does not support the maximum benefits that can be achieved with the New Economy. Policymakers should look to the future, not hang on to the tax regimes of the past. So, what kind of domestic tax system and international tax agreement would raise revenues in an efficient, effective, and equitable manner?

### ***Tax to better match jurisdiction of tax and expenditures***

Among the ways to raise tax revenues, taxing labor's remuneration has probably been the least affected by the transformation of products, production process, or marketplaces of the New Economy. Labor, by and large, remains within the same political jurisdiction as the tax authority.<sup>15</sup> This matters because matching the jurisdiction of the tax regime to that of the provision of government services better allows the preferences of voters to be reflected in both tax rate and level of social expenditures. Moreover, in the knowledge-intensive New Economy, the source of value-added increasingly is labor-based, rather than based on commodity resources or manufacturing processes. Taxing labor's wages avoids the issues of keeping track of location and number of transactions in the production chain or classifying the outcome of what the worker did in terms of good, service, or neither. All told, taxing worker income side-steps the problems of the complexity of the product 'bundle'.

There also are potential savings in tax administration. First, there are fewer workers in the world than transactions, particularly when the current method of taxation is VAT. Firms pay close attention to how much they pay their workers and where their workers are located. Using methods that include reporting, audit, or declaration, tax authorities can work with firms to ensure compliance. Moreover, tax authorities can work with firms that engage in cross-border transactions and production alliances to ensure the proper accounting for incomes earned. True, a firm must be willing to comply with an extra-territorial request for information about its workers' compensation. But, this is less onerous than actually collecting and remitting tax revenues. Private firms should not be the taxing authority, but they should cooperate with it.<sup>16</sup>

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<sup>14</sup> There are challenges to direct taxation as well. For a further discussion of these issues, which further supports the main points of the text, please see Catherine L. Mann, Sue E. Eckert, and Sarah Cleeland Knight, *Global Electronic Commerce: A Policy Primer*, Washington: IIE, 2000.

<sup>15</sup> This is not to say that labor cannot move. But, it is relatively less mobile than firms, particularly at the margin. And, many highly skilled migrants will work for firms that are contained in the tax orbit of some jurisdiction.

<sup>16</sup> Flows of information about wages and compensation between firms and the tax authority does raise privacy concerns.

The questions of fairness and compliance inevitably arise when labor income is taxed relatively more than consumption or capital income. Tax evasion is why many countries chose the VAT, GST, or tariff systems to begin with. These are not new issues, but the reduced ability to tax value-added, transactions, or corporations raises the stakes for finding appropriate approaches to these issues, and charting a course toward changing tax regimes to reflect the new realities.

Under a new tax regime, the level of social expenditures can remain secure. But, what about the choice of social expenditures? The essence of the New Economy is the transformation of economic activities to achieve higher productivity growth: Innovation, business entry and exit, workers moving between firms and staying in the labor force on their own terms because their skills are needed. What kind of social expenditures and regulation enhance this possibility?

Voluminous analysis suggests that achieving an environment supportive of transformation is not obvious or easy.<sup>17</sup> The key points to be made in this essay are:

- ✍ High levels of social spending are still possible, but the tax regime needs to evolve to support this;
- ✍ Transformation of activities is key to the gains of the New Economy, so social spending and regulation must encourage change in the environment of workers and firms, not try to inhibit or moderate change.

## **Imperfections in the Market for Information**

Networked information technologies and, increasingly, the information itself are driving the benefits of the Internet marketplace. For example, when all members of a global supply chain can follow the whole process online, operating efficiency increases, throughput quickens, and all members of the supply chain benefit from reduced inventory costs and increased quality. With more customer information, firms can meet detailed product preferences saving time and targeting demand more effectively, thus reducing the cost and annoyance of misdirected marketing. The marketplace, as well, functions more efficiently and effectively: When information from both buyers and sellers appears on a business-to-business auction site or exchange, better pricing of products (for example, office supplies), superior usage of equipment (for example, in trucking), and quicker elimination of excess (say of past-season fashion clothing) all are now possible. The opportunities of global electronic commerce created by information technologies increase the value of information and the ease of obtaining valuable content. But, with this much information, the potential for misuse also arises.<sup>18</sup>

There is a tension between collectors of information, the relatively few firms that collect and aggregate information, and providers of information, the very many individual business or consumer users whose behavior and characteristics may or may not

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<sup>17</sup> See the extensive, many-volume OECD *Jobs Study*, Paris: OECD, 1995; the OECD, *Fostering Entrepreneurship*, part of the OECD Jobs Strategy project, Paris: OECD, October 1998; and the OECD, *The New Economy: Beyond the Hype*, part of the OECD Growth Project, Paris: OECD, August 2001.

<sup>18</sup> For more discussion of the nature of “public goods” in the Internet marketplace, see pp. 37-41 “Government Guidance and the Economics of Imperfect Markets for Information,” in *Global Electronic Commerce: A Policy Primer* by Catherine L. Mann, Sue E. Eckert, and Sarah Cleland Knight, Institute for International Economics: Washington, July 2000.

be collected with their acquiescence. Aggregators<sup>19</sup> highly value information because they can dissect, combine, and either use or sell the information to others to produce better-tailored products and more efficient processes. These firms want to collect information from everyone and may ignore individual users who want fewer personal or unique business data collected. Under these circumstances, concerned users face an undesirable choice: Use the Internet, but be fearful that the information collected may be used inappropriately; or don't use the Internet, and lose the benefits of this new medium for information and business activity.

### ***Comparing the 'market' vs. the 'mandate' approach to resolving the imperfection***

What is the role for policy intervention to balance these sides—the demands by individuals to control and protect their personal information against the promises of those who want it to create new products and services? Broadly, there are two strategies. Policymakers can *mandate* a specific standard that all firms must follow for how data are collected and used. For example, and characterizing in general terms, the EU 'privacy directive' mandates a specific standard for the treatment of most personal data of EU residents.<sup>20</sup> Or, policymakers can promote incentives so that the *market* innovates and improves the range of choices on whether and how data are collected, compiled, and cross-referenced. The US approach, characterized broadly, in which legislation addresses only financial, medical, and children's information, and where private entities determine and adhere to self-regulatory guidelines, is an example of a more market-oriented strategy.

Is there a winner (in an economic sense) between the mandate and the market approach to balancing the benefits of information use with the concerns over the use of data? The economic theory of the second best suggests that the market solution and the mandate solution cannot be ranked. In neither case will the needs of all individuals be met, nor can we be sure that society's well-being is maximized.

On the one hand, because there are many users and few aggregators, the market approach is likely to yield an incomplete set of "information-use" policies. So the privacy preferences of each unique user may not be met. What are the consequences? Consider a business example. Suppose a firm worries so much about revealing strategic business information by participating in a B2B marketplace that it refuses to participate. Not only is this firm worse off, the benefits from having such an exchange is reduced by having fewer participants. More generally, the value of the Internet derives from its participants, and increases exponentially with the number of users. So if a fear of participating reduces participation, this exponentially reduces the benefits of the Internet to both individuals and to society.

On the other hand, the mandate solution is a "one-size-fits-all" policy that assumes that each person or business has the same preference over use of information as is spelled-out in the mandate. Because people and businesses are not all alike in their attitudes toward privacy, some specific preferences may not be met. In this case, those left out probably would disclose more information to get more tailored products and

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<sup>19</sup> Aggregators include firms that collect data for its principal line of business, but then may sell it to others as well as firms whose principal objective is to collect and analyze click-stream data.

<sup>20</sup> Correctly termed, European Directive on Protection of Personal Data, July 25, 1995.

services. With a mandate policy, some buyers and sellers won't bother to log on. As in the case above, the value of the Internet is reduced exponentially because the number of participants falls.

Which policy approach results in the greater number of unhappy users? This is unknown, which is why the alternative policies cannot be ranked in terms of their impact on efficiency or society's well-being. What is the difference between the two approaches?

Under the market approach, firms continue to face incentives to try to satisfy specific and heterogeneous privacy demands, particularly if those demands are effectively communicated to the information aggregators and are backed by enforcement—points where government intervention could be valuable. The incentives come from the very network benefits (translated into potential profits) that are being lost if the privacy options are insufficient and users defect. By contrast under the mandate approach, the private sector has fewer incentives to innovate to resolve market imperfections since there are common rules for all to follow, and the enforcement issue remains.

### ***What about the Safe Harbor model?***

Beyond the theory of these alternatives and how they might work within the domestic marketplace, is the important issue of the overlap of government jurisdictions. What happens when the economic marketplace encompasses consumers in both jurisdictions? One example of a bridge between the two different approaches to privacy protection is the March 14, 2000 “safe-harbor” agreement between the United States and European Union.<sup>21</sup> Under the agreement, American firms receiving personal data from the EU can subscribe to guidelines promulgated by self-regulatory organizations such as the Better Business Bureau's *BBBOnline* thereby making a commitment to follow the EU rules for data on EU individuals. The firms could be subject to legal action by the US Federal Trade Commission if they do not abide by their commitment.

Does “safe harbor” represent an interoperable approach?<sup>22</sup> It would appear to ensure continuity of US-EU cross-border data flows, but this is actually a different problem than that of the adequate provision of privacy alternatives. Moreover, countries not party to the safe-harbor agreement wonder what will happen to their firms. Must they follow the EU ‘privacy directive’? Can they enter the US safe harbor by following the US Department of Commerce guidelines? Do they need to carve out their own agreement—if so with whom? Without a common understanding about how to treat information, the possibility remains that cross-border data flows could be fragmented, routed around some countries and through other countries, with the potential for great loss to efficiency and global network benefits. More important than data flows, the safe-harbor arrangement between the US and the EU does not yield new privacy options for users, which is the true crux of the matter.

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<sup>21</sup> See [www.doc.com/safeharbor](http://www.doc.com/safeharbor) for the US presentation of the agreement.

<sup>22</sup> For additional discussion of Safe Harbor, see “Negotiating Privacy across Arenas—The EU-US ‘Safe Harbor’ Discussions” by Henry Farrell, chapter 5 of *Common Goods: Reinventing European and International Governance*, ed. Adrienne Héritier, Rowman and Littlefield: forthcoming.

In such a technologically dynamic environment, retaining the incentive for private sector innovation is crucial. The market-oriented approach and technological entrepreneurship offer the greatest potential to come up with innovative solutions to meet the great variety of privacy demands. Innovations such as Anonymizer and Pretty Good Privacy (PGP) come from individual firms. The Platform for Privacy Preferences (P3P) is the outcome of an industry-group discussion and could become a standard feature on Internet browsers.

Will the combination of market incentives and technological prowess be sufficient to generate a full set of privacy solutions to meet all needs? Policymakers in the United States (where the market-oriented policy approach is strongest) must push harder to get firms to respond to market demands for privacy alternatives. One way is to threaten what type of restrictive legislation could emerge if consumer demands for privacy options are ignored and opportunities to improve information-use policies squandered. For example, the plethora of privacy legislation put forward before the US Congress in 2001 threatened the market-oriented approach, although did not yield mandated standards. A more active statement by policymakers is needed and clearer threats outlined if the private sector is to respond appropriately.

### **Final Observations: Evolving the Concept of Welfare State**

The benefits from the New Economy can be gained only through transforming the activities of individuals, business, and governments. A key component of those gains is a more close alignment of the interests of the consumer and the producer, which implies information-intensity and greater heterogeneity in product 'bundles'. Policymakers need to allow for these transformations, for the intensive use of information, and for the heterogeneity in output.

However, these aspects of the New Economy can cause problems for the archetypal Welfare State. First, transformation in activities means, at least for some time, volatility in employment and businesses, and differential returns to skills, among other things. To the extent that the archetypal Welfare State smoothes-out these changes, either the transformations may not occur or the cost of smoothing them out could be quite high in terms of income support. Second, information is a key ingredient to the transformations and the creation of heterogeneous product bundles. To the extent that the archetypal Welfare State mandates a uniform approach to the use of information, taking the view that it knows best what its constituents want, the heterogeneity in interests will not emerge to inform the marketplace.

How might the old Welfare State evolve into the New Welfare State for the New Economy? To reduce the costs of transformation, the key is labor force policies and business market policies. The New Welfare State for the New Economy will focus even more on policies that allow workers and firms to fill opportunities coming from change, rather than focusing on moderating outcomes and avoiding change. A high level of government spending commitment to these objectives can be met through an evolving tax environment that ultimately will focus more on taxing income and less on taxing transactions.

To reduce the potential for misuse of information while also allowing the value of heterogeneity to emerge, the New Welfare State should focus on preserving the private sector's incentives to innovate. At the same time, the government can play a role in informing citizens about their choices, and enforce the private sector's commitments when necessary. Individuals need to know more about what is the value of their information and how it can be used. Firms need to be held responsible for information use, and enforcement of misaction must be swift. Because only the private sector can evolve new strategies for both using and protecting information, preserving the incentives to innovate is paramount.

The New Welfare State will be characterized more by incentives and responsibilities. The public sector needs to promote incentives so that the private sector—defined either as an individual or as a business—works to transform the economy, to close the market imperfections in information, and to manage the problems of cross-border jurisdictional overlap in tax regimes. The private sector—as individuals and firms—needs to be willing to take advantage of training, education, and business assistance so that it can adjust, must be willing to work with the public sector to pay for such activities, and must come up with strategies that meet the demands for a fuller-range of information-use options. This is not the end of the Welfare State, it is a Welfare State for a dynamic environment that focuses on enabling transition to achieve superior productivity and growth, rather than one that focuses on moderating outcomes and attenuating possibilities. How much better to ensure that the sailor who goes out to sea has a good yacht and good training to withstand exciting weather than to relegate them all to a stagnant pond.