

# Uncovering the Hidden Value of Digital Trade

## Interactive policy brief

### Towards a 21st Century Agenda of Transatlantic Prosperity

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The United States and the European Union enjoy one of the healthiest trade relationships on the planet.<sup>1</sup> The nearly \$1.06 trillion [€770 billion] of goods and services they exchange each year accounts for almost one-third of the annual trade flows worldwide.<sup>2</sup> And yet, even figures that large may be only the tip of the iceberg. As digital technology becomes ever more pervasive and the world economy morphs into fundamentally new shapes and configurations – forming and re-forming around the radically simple and cheap communication made possible by the Internet – the foundation of economic life is shifting, too. These days, Europe and the U.S. no longer compete head-to-head over something as basic as who can field the best home-based team to get the finest results. Instead, they compete as leaders of complex supply chains with design, manufacture and ultimately consumption spread around the globe in a multifaceted and unprecedented way. They compete to offer advanced products and services, many of which will be delivered digitally to customers in far away destinations, whom the salesman will never know and likely never meet. And they struggle – under these intensely new circumstances – to make heads or tails of a fast-moving reality, where decisions that will determine our fate tomorrow need to be made in real time today.

Obviously, this is knowledge-intensive work, and that's precisely the point. More and more, global trade has come to rely on a vital new commodity: data.<sup>3</sup> Data is how a modern company understands and serves its customers better. Data is what gives managers their understanding into what is happening around the world. And, increasingly, data is the product itself, serving as the raw material for new insights put

<sup>1</sup> This paper was launched in Brussels at the High-Level Roundtable on Driving the Hidden Value of Digital Trade. The authors would like to thank Diana Carew, Sergey Filippov, Isobel Head, Stéphanie Lepczynski, Lindsay Lewis, Will Marshall, Alan Mauldin, Chrysoula Mitta, Christopher Padilla and Andrew W. Wyckoff. Special thanks as well to the Alfred P. Sloan Foundation for the financial support behind some of the research presented in this study. As always, any errors of fact, judgment or omission are the authors' sole responsibility.

<sup>2</sup> The figures are from the Office of the United States Trade Representative. The exchange rate used throughout this paper is the average euro/dollar exchange rate for 2013. For a detailed statistical overview of the U.S.-EU trade relationship, visit the USTR website or the European Commission Trade Directorate-General website.

<sup>3</sup> Paul Hofheinz and Michael Mandel, Bridging the Data Gap: How Digital Innovation Can Drive Growth and Create Jobs (Brussels and Washington, DC: The Lisbon Council and Progressive Policy Institute, 2014).

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# 'Cross-border digital connections have become woven inextricably into daily lives and the fabric of our economic existence.'

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See especially [United States International Trade Commission, Digital Trade in the U.S. and Global Economies, Part 2 \(Washington, DC: U.S. International Trade Commission, 2014\)](#); [Maria Borga and Jennifer Koncz-Bruner, Trends in Digitally Enabled Trade in Services \(Washington, DC: U.S. Department of Commerce Bureau of Economic Analysis, 2012\)](#); [Joshua P. Meltzer, \*The Importance of the Internet and Transatlantic Data Flows for U.S. and EU Trade and Investment\* \(Washington, DC: Brookings Institution, 2014\)](#).

<sup>5</sup>

[Michael Mandel, \*Data, Trade and Growth\* \(Washington, DC: Progressive Policy Institute, 2014\)](#).

<sup>6</sup>

*Ibid.*

<sup>7</sup>

The data is from Global Bandwidth Research Service by TeleGeography. Visit [www.telegeography.com/research-services/global-bandwidth-research-service/index.html](http://www.telegeography.com/research-services/global-bandwidth-research-service/index.html).

<sup>8</sup>

Mandel, op. cit.

forward as new services, and as the reservoir of a creative economy where knowledge is often diffused horizontally without the intermediaries whose role in commerce defined the pre-data economy. Put simply, data and the consumption of data are not just a new natural resource – they are the key commodity in today's knowledge-based economy. They are the essential element whose mastery (or incompetence) will determine which regions succeed and which regions fail, who will create and own the new jobs, and who will serve primarily as passive consumers of other people's digital services. The way we use data, the speed and effectiveness with which we collect it, analyse it – and ultimately share it – will set the winners from the losers in this very modern world of cheap computing power, increasingly irrelevant national boundaries and additional-marginal-cost-free global interconnection.

How important then is data to international trade flows? Very important, to be sure. But, oddly, experts are hampered by a crucial challenge: there is still not much data on how significant data really is. This paper is divided into three parts. In part one, we will seek to quantify the role of data in the transatlantic trade relationship. There, we conclude that if four of Europe's six largest economies (France, Germany, Italy and Spain) could raise their digital density – the level at which they consume, process and share data – to the height of, say, the United Kingdom, they could add roughly €200 billion [\$274 billion] to their economy, an astonishing 2% improvement. If those six countries could reach the level of digital density of the United States, the world's leader in the consumption and production of data, the six countries could count roughly €460 billion [\$630 billion] of additional economic output per year – an amazing 4% addition.

In part two, we will look at the emerging regulatory model in the European Union, asking whether regulators are posing the right questions and creating the right environment in which data-driven European companies can thrive. In part three, we will make policy recommendations aimed at regulators on both sides of the Atlantic.

## I. How important is data in the transatlantic trade relationship?

Despite its evident rise, scholars have struggled in recent years to quantify the role of data in transatlantic trade (see the box on Measuring the Impact of Data in Transatlantic Trade on page 3 for more).<sup>4</sup> In this, they have been hampered by one important fact: many cross-border data transfers do not involve money changing hands as information moves from one country to another. This lack of a monetary footprint makes many economically significant cross-border data flows hard to count in traditional trade statistics based on imports and exports. Despite this, there is massive evidence showing that the amount of data crossing the Atlantic on a daily basis is rising much faster than the traditional exchange of goods and services.<sup>5</sup> If one were to take, for example, the data-carrying capacity of transatlantic submarine cables as a useful proxy, it rose at an average annual rate of 19% between 2008 and 2012.<sup>6</sup> Similarly, international demand for broadband increased at a compound rate of 49% in the same period.<sup>7</sup> By comparison, global trade in goods and services, adjusted for inflation, rose at an average rate of just 2.4% between 2008 and 2012.<sup>8</sup>

# 'Scholars have struggled in recent years to quantify the role of data in transatlantic trade.'

## Measuring the Impact of Global Data Flows

How much impact do international data flows have on national gross domestic product? Not surprisingly, it depends on how they are measured. The conventional trade statistics, designed for an industrial economy, pick up only a portion of cross-border data flows. As a result, the official numbers make it seem that digital trade is relatively insignificant.

Consider this: A [massive study by the International Trade Commission of the United States](#) concluded that “digital trade, through the effects of the Internet in lowering international trade costs in digitally intensive sectors, increases U.S. real GDP by an estimated 0.0% to 0.3% (or \$1.6 billion to \$38.8 billion [€1.16 billion to €28.3 billion]), increases real wages by 0.9% and increases U.S. aggregate employment by 0.0% to 0.3% (or 0.0 to 0.5 million full-time equivalents).” In other words, after a massive effort, the ITC concluded that digital trade, as conventionally measured, was at best having a superficial impact on the \$17.4 trillion [€12.7 trillion] U.S. economy, and at worst no impact at all.

To deal with the apparent unimportance of digital trade in the official statistics, various studies have broadened the definition of digital trade, looking to better capture the value of international data flows in that way. A [study from the U.S. Department of Commerce Bureau of Economic Analysis](#) looked at “digitally-enabled” industries such as finance, and counted all trade from those industries as part of digital trade, whether the trade was actually delivered digitally or not. By that measure, it found that digitally-enabled services accounted for 61% of U.S. service exports in 2010 and 56% of service imports, resulting in a trade surplus of \$116 billion in “digitally-enabled services.” A [similar study from the Brookings Institution](#) found that U.S. exports of digitally deliverable services were \$383.7 billion [€280 billion] in 2012 and imports were \$233.6 billion [€169.7 billion], representing 61% of total U.S. services exports and 53% of all U.S. services imports.

These findings seem more plausible, but the results of all these studies – including this one – should leave no one satisfied. The fact is, policymakers are flying by the seat of their pants, relying on pre-Internet accounting to inform their decisions on how the fast-emerging 21st century economy should best be regulated. Statisticians and policymakers urgently need to work together to define a better evidence base upon which more accurate public awareness can be built and further discussion – and decisions – can be based. The public particularly requires it – because the relative importance and role of data in the modern economy need to be clearly understood and openly articulated. Put simply, an outdated statistical approach that consistently understates the value of the new economy’s most important assets is not a basis for informed decision making in the 21st century.

# 'The Internet is the greatest facilitator of deriving value from intangible assets that the world has ever known.'

<sup>9</sup>

See [Jan Hargreaves and Paul Hofheinz \(eds.\), \*Intellectual Property and Innovation: A Framework for 21st Century Growth and Jobs\* \(Brussels: the Lisbon Council, 2012\).](#)

<sup>10</sup>

See, for example, Jürgen H. Daum, *Intangible Assets and Value Creation* (London: Wiley, 2012); See also [Carol Corrado, Jonathan Haskel, Cecilia Jona-Lasinio and Massimiliano Iommi. "Intangibles and Industry Productivity Growth: Evidence from the European Union," INTAN-Invest database working papers](#) (New York: The Conference Board, 2014) [Ibid.](#), "Intangible Capital and Growth in Advanced Economies: Measurement Methods and Comparative Results," *INTAN-Invest database working papers* (New York: The Conference Board, 2012).

What's more, there is something fundamentally different that distinguishes cross-border data flows irrevocably from traditional trade in goods and services. When a physical good is sold from Country A to Country B, it appears as an export (a good thing, in the minds of most economists) in Country A's accounts and an import (a relatively bad thing to many economists way of thinking) in Country B's. Similarly, if an individual worker in Country A, such as an accountant, provides a service to an individual or company in Country B, the value of that worker's time appears as an export in Country A's account and an import in Country B's.

But cross-border data flows follow a different logic, one that defies the usual meaning of exports and imports. A movement of data from Country A to Country B is usually accomplished by copying the data rather than by the physical transfer of a good. That means even after sale the "good" in question is still potentially available in both Country A and Country B.<sup>9</sup> The result: cross-border trade dramatically increases the utility of data to the global economy.

This has contributed to an interesting anomaly, which economists are struggling to accurately measure and interpret – the rise of so-called "intangible assets," whose importance to the modern knowledge-driven economy grows in leaps and bounds even as they continue to defy efforts to account for them precisely.<sup>10</sup> Correctly defined, intangible assets are resources a company or country holds which have no physical presence, but which nonetheless amount to the actual materials the company uses to do business. Examples include patents, copyrights, franchises, goodwill, trademarks, trade names and technology – the types of assets created through investment in research, development, know-how, organisational capital and similar things (see Table 1 on page 5 for a list of key areas of intangible-asset investment). In the end, the "goods" produced through investment in these areas may lack physical substance – but they clearly don't lack value. And modern companies in the developed world – big and small – are essentially working with the same inputs these days. A typical 21st century business will combine and re-combine intangible assets to build, provide and deliver advanced goods and services in new and ever newer combinations. The larger companies will rely on the Internet to help them understand and coordinate production processes whose complexity has grown well beyond the ability of a human mind and a hand-written ledger to coordinate. And all of them will use the Internet to help them sell and provide services in far away lands to customers whom they will never see – though they will likely know them very well. The data they collect through these sales will help them understand most customers' needs and preferences better than customers have ever been understood before.

And this is where transatlantic trade in data comes in. Because the Internet – with its ability to allow companies, big and small, to exchange and analyse large amounts of information at marginal cost in real time is the greatest facilitator of deriving value from intangible assets that the world has ever known. For large companies, this means primarily the flow of information – they rely on that exchange to coordinate increasingly complex management and production supply chains, often spread across many nations and several continents. But small companies benefit as well. The Internet allows them to take on global scale from day one – in theory, every

# 'The amount of data crossing the Atlantic on a daily basis is rising much faster than the traditional exchange of goods and services.'

Table 1. Types of intangible investment

Innovative property	Research and development Product development Films, music, books, and other copyrightable material Architectural and engineering designs
Computerised information and platforms	Software development Database development
Economic competencies	Brand equity, including advertising, marketing, and market research Organisational structure, including consulting and organisational development Internal training

homemaker can now sell marmalade to a global audience of billions with a few clicks of the mouse – a playing-field-levelling device whose importance in global commerce is only starting to be felt.<sup>11</sup> And cloud computing services as well have given small- and medium-sized enterprises access to back office and other advanced business services once available only to larger organisations, allowing them to turbo-charge growth – and get by with less bureaucracy and legacy costs.<sup>12</sup>

So how, then, should we quantify the economic value of data flows to a country? One way would be by comparing the level of digital density in the country and the amount of money invested in so-called “intangible assets,” whose importance to the Internet economy we have already discussed. Sure enough, we find that digital density – which we define as the amount of data used per capita in an economy – correlates rather directly with investment in intangible assets (See Chart 1 on page 6). The more data people and businesses use in a given country, the more we find companies, individuals and others are willing to invest in intangible assets. By contrast, countries where relatively little data is used by people and businesses also have correspondingly low levels of intangible-asset investment.

If the base measure is digital density, the question then becomes, what and whose data are people consuming? And how much of it is arriving across borders? While we'd all like to think that the data used on the Internet comes mostly from our national economy, the fact is that much of it is arriving across borders – particularly in Europe, where Europeans have shown themselves to be avid consumers of U.S. and Asia-generated digital content. Could digital density, then, be used as a proxy for consumption of cross-border data flows? In the absence of more advanced methods of accounting for trade in data, we believe the answer is “yes.” To be sure, there is an assumption here. But it is no less of a leap than the assumptions made when others measure transatlantic data (see the box on Measuring the Impact of Global Data Flows on page 3 for a more detailed discussion). And it has the added advantage of putting us very near the actual data being used by real businesses and consumers.

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Ann Mettler and Anthony D. Williams, *The Rise of the Micro-Multinational: How Freelancers and Technology-Savvy Startups are Driving Growth, Jobs and Innovation* (Brussels: The Lisbon Council, 2011).

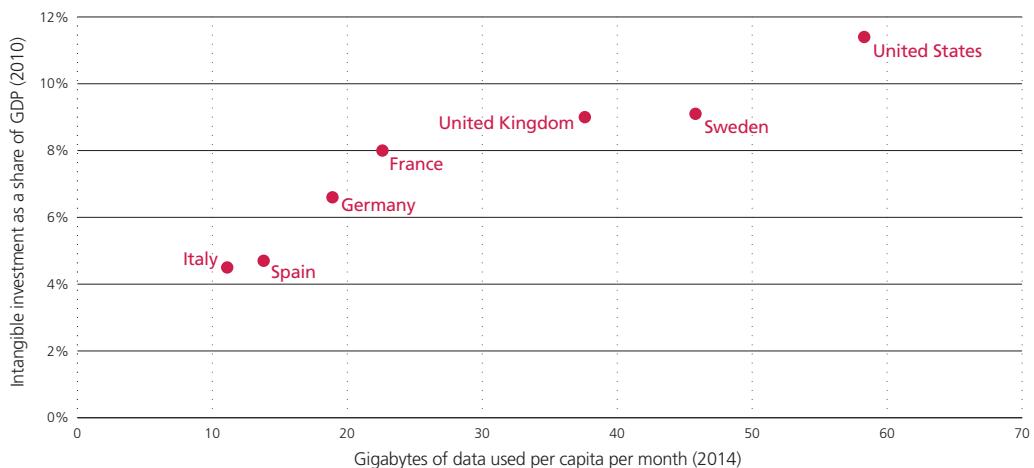
12  
*Ibid.*

## 'Many of these economically essential connections show up nowhere in the trade statistics.'

<sup>13</sup>  
See, for example, Sergey Filippov, *Data-Driven Business Models: Powering Startups in the Digital Age* (Brussels and London: The Lisbon Council and Nesta, 2014).

<sup>14</sup>  
We use a broad definition of national output that includes investment in intangibles, including some intangibles that are not currently counted in official estimates of GDP.

Chart 1. Digital density and investment in intangible assets



Sources: Cisco, INTAN-Invest, Progressive Policy Institute

And what we find is rather interesting, as well. For starters, we see clear evidence of a correlation between usage of data and investment in intangible assets, as mentioned above. But the evidence also suggests that if countries can raise their usage of data, by, for example, ending geo-blocking or making it easier to access legal content, that increase in digital density will likely be accompanied by a corresponding rise in investment in intangible assets – which as we have seen is the fuel, if not actually the engine, of modern economic success.<sup>13</sup>

In other words, we believe, based on the evidence, that cross-border data trade, digital density, and intangible investment all go together. We cannot imagine modern scientific research – an essential part of intangible investment – without global collaboration and a domestic digital infrastructure. Similarly, domestic content creation and consumption in individual countries is invigorated by global creativity, and not diminished by it.

We use this correlation between usage of data and intangible investment to estimate potential gains from participating in the global digital economy. If, for example, four of Europe's largest economies – France, Germany, Italy and Spain – all had at least the same level of digital density as the United Kingdom, our estimates suggest that their level of intangible investment as a share of GDP would rise as well. Based on observed correlations, their level of intangible investment would rise by roughly €200 billion [\$274 billion] per year, an astonishing 2% improvement in overall national output, broadly defined.<sup>14</sup> If those six countries could reach the level of digital density of, say, the United States, their economies could see roughly €460 billion [\$630 billion] of additional economic output per year – an amazing 4% increase. See Tables 2 and 3 on page 7 for more.

# 'The Internet allows small- and medium-sized companies to take on global scale from day one.'

The truth is, cross-border digital connections have become woven inextricably into our daily lives and the very fabric of our economic existence. With the Internet, cross-border collaboration, communication and coordination has become infinitely easier. It is no coincidence that the golden age of supply chains didn't happen until the world was mostly connected digitally. And today many of these economically essential connections show up nowhere in the trade statistics.

**Table 2. Gains from digital trade**

Estimated increase in intangible investment if digital density level rose to level of UK

	In billions of euros	As percent of national GDP
France	20.9	1.0%
Germany	69.5	2.4%
Spain	45.7	4.3%
Italy	73.2	4.5%
Total for six countries*	209.0	2.0%

Source: Authors calculations

\*Including the United Kingdom and Sweden, which already has a higher digital density than the UK

**Table 3. Gains from digital trade II**

Estimated increase in intangible investment if digital density level rose to level of US

	In billions of euros	Increase in percent
Sweden	10.0	2.3%
United Kingdom	54.0	2.4%
France	72.0	3.4%
Germany	139.0	4.8%
Spain	71.0	6.7%
Italy	112.0	6.9%
Total for six countries	459.0	4.4%

Source: Authors calculations

# 'Data is not just a new natural resource – it is the key commodity in today's knowledge-based economy.'

<sup>15</sup>

For a detailed account of the Snowden revelations, see the [67-page Wikipedia entry on Edward Snowden](#)

<sup>16</sup>

[European Commission, Communication from the Commission to the European Parliament and the Council on the Functioning of the Safe Harbour from the Perspective of European Union Citizens and Companies Established in the EU, Brussels, 27 November 2013 COM\(2013\) 847 Final.](#)

<sup>17</sup>

For a discussion of the damage arising from the Snowden revelations, see [Edward Lucas, The Snowden Operation: Inside the West's Greatest Intelligence Disaster \(Seattle: Amazon Digital Services, 2014\).](#)

<sup>18</sup>

On 25 March 2014, U.S. President Barack Obama formally proposed new restrictions on National Security Administration mass requisitioning of telephone data for meta-data analysis. Under the new proposal, the NSA would need to conduct searches on the premises of telephone companies (so the data would not actually change hands) and the NSA would be required to receive a warrant from a judge for any search of online material.

Parts of the proposal were enacted in law in June 2015.

See [Joint Statement from the Office of the Director of National Intelligence and U.S. Department of Justice on the Declassification of Renewal of Collection under Section 501 of the Foreign Intelligence Surveillance Act \(FISA\), 08 December 2014](#) and the Wikipedia entry on [Barack Obama on Mass Surveillance](#).

<sup>19</sup>

One solution would be to allow a one-time "donate your data to science" clause to all medical data, which would allow patients to give their data over to medical research for all time without the need for prior consent. For a further exploration of this idea – and the potential pitfalls of proposed European data protection rules – see [Alan McQuinn, EU Data Privacy Rules Threaten Medical Research \(Washington, DC: ITIF, 2014\)](#)

## II. The implications for international trade

If data flows are so important to the international economy, perhaps policymakers should spend more time devoting themselves to ensuring that they remain open, free and unassailable. To that end, policymakers on both sides of the Atlantic bear much responsibility for the sorry reputation that transatlantic trade in data has taken on in recent years. Most notably – and spectacularly – there are the sordid disclosures of Edward Snowden – a former Central Intelligence Agency employee – who revealed to the world that the U.S. government was bulk monitoring telephone records and clandestinely looking at some encrypted and presumed-safe Internet communications through a programme called PRISM.<sup>15</sup> To be sure, the programme set in motion a series of reforms to U.S. intelligence gathering practices, including an on-going reform of U.S.-European Union Safe Harbour measures, undertaken at the behest of the EU and yet to conclude.<sup>16</sup> But the damage had been done. Internet transactions – and data in general – rely on trust. And the PRISM revelations did more than can be stated to undermine confidence that the storage and analysis of data in the U.S. was safe and/or secure from prying eyes of all types. And that development has given great ammunition to the enemies of transatlantic data flows and of the vital transatlantic economic relationship as well.<sup>17</sup>

To be sure, the U.S. must urgently shape up its intelligence-gathering policies – not simply to bring the country back within the confines of globally recognised and accepted norms, but to counter the rising presumption that data and transatlantic data flows are somehow unsafe or dangerous.<sup>18</sup> If data and transatlantic data flows are indeed the backbone of economic life in both of the world's most important developed economies, then urgent action should be taken to restore trust – and tighten rules – in this area, as we will argue in the next section on policy recommendations.

But Europeans have their work cut out for them as well. A 2012 proposal to implement a General Data Protection Regulation – which is still working its way through the European decision-making process – is starting to look counter-productive and misconceived at best. To be sure, the European law was well-intentioned. It would, for example, forbid the use of data collected for one purpose to be used for another without the prior consent of the person whose data is concerned. It would ban the transfer of data to countries that do not meet the EU's high standards for data privacy. And it would require companies above a certain size to hire or designate a full-time "data protection officer," whose work would in turn be supervised by a growing network of national "data protection supervisors" – creating, in effect, an entirely new European trans-national regulatory structure comparable in size and scale to the structures in place for regulating financial, energy and telecommunications markets.

These may be good ideas on paper. But data experts are concerned that these rules would severely hamper the vast field of data analytics as we know it – and put Europe at a distinct disadvantage. For starters, the rules on "prior consent" would essentially render data analysis impossible – a fact which has led to much opposition to the new proposals from inside the European scientific and research community, which would like to be able to use and re-use, for example, anonymised health data to work on cures for cancer without having to secure permission from an entire database of users every time the data is used for a new and previously-unforeseen purpose.<sup>19</sup>

# 'Urgent action should be taken to restore trust.'

The ban on transfer of data to non-EU approved jurisdictions is no better. One U.S. consultant has calculated that – if the rules were in effect today – only 11 countries would qualify – none of them the U.S., which, whatever you might think of its data-protection standards, is still the world centre for data storage and analytics, accounting for an astonishing 67% of all cloud services on offer today.<sup>20</sup> This would effectively destroy the entire cloud-computing sector as we know it today. And, while there are many European cloud alternatives, the fact is many European small businesses are dependent on the free or cheap cloud services of U.S. providers – including [Amazon Web Services](#), [Facebook](#), [Google](#) and [Salesforce.com](#) – each of which have (to date) developed cheaper, more affordable and vastly more user-friendly cloud services than their European rivals. Cutting them off through regulation would only slow the development of competitive European services – and deprive European companies of the competitive advantage that access to good, cheap service today provides.<sup>21</sup>

20

[Cameron Coles, "Only One in One Hundred Cloud Providers Meet Proposed EU Data Protection Requirements," \*Skyhigh Networks\*, 11 August 2014.](#)

21

For an excellent discussion of the way protectionism harms national competitiveness, see [William W. Lewis, "The Power of Productivity: Poor Countries should Put Their Consumers First," \*McKinsey Quarterly\*, 2004, No. 2.](#)

## Left Hand, Right Hand: Do European Policymakers Always Know What They are Doing?

Many provisions in the European Union's proposed [General Data Protection Regulation](#) run contrary to other key European policy initiatives, including the "[automatic exchange of information](#)" efforts underway at the European level to cut down on tax evasion. Skyhigh Networks, a U.S.-based consulting firm which advises companies on compliance with international data standards, calculates that under the proposed EU data protection rules only 11 countries would meet the exceptionally high standards under which the EU would allow data to be transferred across borders. Of those 11 countries, seven are tax havens. This is an indication of the nefarious use that could easily be made of "personal-data protection" if carried to its permissible extreme under the new rules. The 11 countries that Skyhigh Networks believe are in compliance with the proposed standard are Andorra, Argentina, Canada, Faroe Islands, Guernsey, Isle of Man, Israel, Jersey, New Zealand, Switzerland and Uruguay ([Source: Skyhigh Networks](#)).

The European Commission's recent [Digital Single Market](#) proposals also call for a "once-only" initiative of the type in use today in Estonia. Under this proposal, citizens would only have to give their data over to public authorities one time, allowing a dramatic cut in the amount of time and inconvenience involved in dealing with public authorities. It sounds great, but the proposal would obviously fall afoul of the data privacy regulation being promoted simultaneously by the European Commission's directorate-general for justice and consumers. To succeed, public agencies need to be able to share data among themselves – a process made possible in Estonia by an advanced data sharing service called X-Road. [For more information, visit \[www.ria.ee/x-road\]\(http://www.ria.ee/x-road\).](#)

# 'Despite their differences, Europe and the U.S. have more in common than meets the eye.'

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Laurits R. Christensen, Andrea Colciago, Federico Etro and Greg Rafert, *The Impact of the Data Protection Regulation in the EU* (Denver: Analysis Group, 2013).

Finally, there is the issue of the mandatory "data protection officers" which all companies above a certain size would be required to retain. One study from the University of Milan Biocca, Ca' Foscari University Venice and the Denver-based Analysis Group estimated that if the data protection officer provisions of the EU regulation are implemented as written, it would cost each effected European small- and medium-sized enterprise as much as €7,200.00 in additional compliance costs per year.<sup>22</sup> This, in turn, would suppress jobs in some sectors, reducing employment by as much as 0.6% in particularly heavy hit industry. Even worse, it would create a vast new bureaucracy – which might marginally improve the data protection standards in some areas, but could easily come to represent essentially its own interest, i.e., the interest in making sure that Europe retains draconian data protection rules that need a massive pan-European agency to enforce. One would think that – faced with the "regulatory capture" one sees so clearly today in the European telecommunications sector, where reform has been essentially blocked by well-entrenched coalitions that often include the national regulators – Europeans would pause to reflect before they create new national and transnational agencies around a pre-Internet conception of data protection that will harm Europe's competitiveness and prove very difficult to enforce over time.

### III. Policy recommendations

Oddly, despite their differences, Europe and the U.S. have more in common than meets the eye. As the largest developed economic areas in the world, they are both to a remarkable degree dependent on the free flow of data for ensuring the economic prosperity of tomorrow. And that free flow itself will, in turn, be dependent on confidence building measures on both sides of the Atlantic. For the U.S., this means coming to terms – convincingly and publicly – with the blow to trust in the U.S. system that revelations of the PRISM system have brought in their wake. For Europe, it means dramatically and effectively changing the tone in the data protection debate, moving from a scare-mongering stance that subliminally casts all data and data analytics as a threat to common wellbeing to a trust-enhancing rhetoric that assigns a well-regulated data regime its proper place in the economy of tomorrow.

And therein lie the grounds for an important round of transatlantic cooperation – if policymakers are visionary enough to use the current political configuration to solve national problems in the name of greater transatlantic cooperation. First and foremost are the on-going [Transatlantic Trade and Investment Partnership \(TTIP\)](#) negotiations. Europeans have vowed – on more than one occasion – that data and data privacy will not be part of that negotiation. Americans have, for their part, made clear that given the enormous role that data plays in transatlantic trade, there can be no TTIP agreement unless measures which many (including U.S. President Barack Obama) see as thinly disguised protectionism against successful American companies are abandoned and adequate guarantees of free and fair access given in return.

Oddly, a consensus on these points might not be so hard to find. Having data trade as a part of the TTIP negotiations is still desirable. But if that's not possible, one alternative might be to create a separate forum outside of the TTIP negotiations

# 'Herein lies the ground for an important round of transatlantic cooperation.'

where a U.S. and European protocol on data could be negotiated and agreed, and eventually opened up to other free and democratic countries to sign – a Geneva Convention on the Status of Data.<sup>23</sup> This forum could serve two important functions. First and foremost, it would allow the Europeans a useful way of negotiating an international accord on data (which they will need to do if they are serious at all about promoting transatlantic trade) without having to climb down on their ill-considered demand that data trade not be included as part of the TTIP negotiation. But it would also allow the Americans to tick an essential box – namely, it would send an important message to the outside world that the U.S. has fixed its system. To be sure, the negotiations will be tough, and reforms will be necessary on both sides. But that is what trade rounds are for: not simply to open barriers to trade and increase the economic pie, but also to serve as important catalysts for domestic change that ought to have taken place anyway. Trade negotiations are not, as some argue, a “race to the bottom.” To the contrary, at their best they are an honest effort to raise the standards of everybody’s game. That’s what TTIP – and the accompanying agreements – should be.

Finally, we began this paper by decrying the poverty of international statistics when it comes to measuring trade and data. And we would be remiss not to say something about this in the conclusions and policy recommendations. Put simply, statisticians need to recognise the increasingly important role of data in international trade – and they need to give us better statistics for demonstrating, understanding and improving it. This paper has been a humble start towards work in that direction. We hope that the [Organisation for Economic Co-operation and Development](#) – at its forthcoming Digital Economy Ministerial in Cancun, Mexico, set to convene in 2016 – will pick up this important work and carry it forward.

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We are indebted to Daniel Castro of the Information Technology and Innovation Foundation (ITIF) for this idea. See [Daniel Castro, \*The False Promise of Data Nationalism\* \(Washington, DC: ITIF, 2013\)](#).

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