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#### Introduction

The year 2016 has seen several unanticipated political outcomes and some even less expected market reactions. Specifically, it took four days for financial markets to recover from the Brexit vote, four hours to recover from the results of the US presidential election and approximately 40 minutes to recover from the outcome of the Italian referendum. As this update of our 2015 report "The End of Globalization or a more Multipolar World?" explains, such landmark developments may represent a significant departure from globalization as we know it. Although several indicators meanwhile confirm that gradual economic recovery is underway in major geographies, its pace is likely to remain insufficient to return to pre-2008 levels and foster globalization patterns known in the past. In fact, we already observe a continued deceleration in the pace of flow of trade, people, finance and information.

At this point, we believe that there are three potential paths that globalization can take going forward. It could continue more or less unchanged, which we consider increasingly unlikely. Alternatively, the rise of Asia and a stabilization of the Eurozone point toward a more multipolar arrangement. The third scenario an "end to globalization" is the least likely and least desirable and would consist of a major slowdown in economic growth and trade with a rise in protectionism, geopolitical conflicts between the "great powers" and a backlash against global corporations, among other developments.

Although globalization is unlikely to come to a halt entirely, we will not return to the kind of globalized world we have become used to. It is being replaced by multipolarity, characterized by the rise of regionally distinct approaches to economics, law and governance. In this context, we believe that inequality and immigration will be among the key factors to frame the socio-economic debate. In terms of the competitive dynamic between regions, there are several steps that will need to be taken in order to define the rules of the evolving multipolar world. For instance, the European Union will need to address the governance terms of the Eurozone as a fully functioning monetary and financial area as well as its foreign policy, where Europe needs to have a stronger "single voice."

We believe that ultimately, multipolarity is the most realistic scenario for the future. However, multipolar stability will require careful calibration if policy errors, rivalries and geopolitical tensions are to be prevented.

Thank you for taking an interest in our research. We hope you find the data and conclusions of this paper valuable and insightful.

Urs Rohner Chairman of the Board of Directors Credit Suisse Group AG



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## Three paths globalization could take

The year 2016 may go down in history as the portentous period when globalization as we have come to know it came to an end. Various events mark the end of a long phase of globalization driven largely by western multinationals, markets and laws, coupled with the startling rise in wealth in emerging economies. The easy flow of trade and people may now slow and the world could move toward multipolarity – regions that are distinct in terms of their economies, laws, cultures and security networks.

Michael O'Sullivan and Krithika Subramanian

Globalization, which we can define as the increasing interdependence and integration of economies, markets, nations and cultures, is the most powerful economic force the world has witnessed in the past seventy years. It is now so pervasive in its effects and has produced so many startling outcomes - for example the rise of global cities, the successes of small states, growing wealth in emerging economies, the emerging consumer and fast-changing consumer tastes – that we risk taking it for granted. The current wave of globalization is the second the world has seen, with the first one occurring between the years 1870 and 1913, built on the fruits of the industrial revolution and the rise of the American economy. The current period effectively dates from the fall of communism and to a large extent has been driven by US multinationals, the advent of the euro, the growth of financial markets and the development of many emerging economies. As such, if globalization slows or changes, the consequences for companies, markets and politics will be enormous. This is our second publication on the path from globalization to a multipolar world. In this document we update our key indicators, which show that globalization is slowing.

#### Game over?

We believe that the world is now leaving globalization behind it and moving to a more distinct multipolar setting. We also update our "end of globalization" risk analysis section and expand upon many of the issues that appear to be driving voter behavior in developed countries. If we consider flows of trade, people, finance and media, it seems that there are three paths globalization could take.

The first of these is that globalization continues in the form we have come to know and understand over the past thirty years. In substance, this means the dollar continues its role as first among equals in the foreign exchange world, generally western multinationals dominate the global business landscape and the fabric of international law and institutions are still western in nature. In economics, macroeconomic volatility is low, trade grows with few interruptions from protectionism and the internet economy grows across borders. Socio-politically, the significant development is that human development improves, characterized by more "open societies." This scenario may better describe the past than the future, and it may well be that we are on course for a more multipolar world.

The second scenario is based on the rise of Asia and a stabilization of the Eurozone so that the world economy rests, broadly speaking, on three pillars the Americas, Europe and Asia (led by China). In detail, we would expect to see the development of new world or regional institutions that surpass the likes of the World Bank, the rise of "managed democracy" and more regionalized versions of the rule of law migration becomes more regional and more urban rather than cross-border, regional financial centers develop and banking and finance develop in new ways. At the corporate level, the significant change would be the rise of regional champions, which in many cases would supplant multinationals. We would also expect to see uneven improvements in human development leading to more stable, wealthier local economies on the back of a continuation of the emerging market consumer trend. In Europe, the European Union (EU) halts its outward expansion and, optimistically, thrives as the restructuring of banks and companies makes for a leaner economy.

Then there is a third darker and more negative path that recalls the collapse of globalization in 1913 (see page 6) and the subsequent onset of World War I. Although the world has been stressed by the global financial crisis and terrorist attacks in recent years, these developments have arguably led to more rather than less cooperation between nations. An "end of globalization" scenario is driven by slowdown in economic growth and trade with the added possibility of a macro shock (from indebtedness,

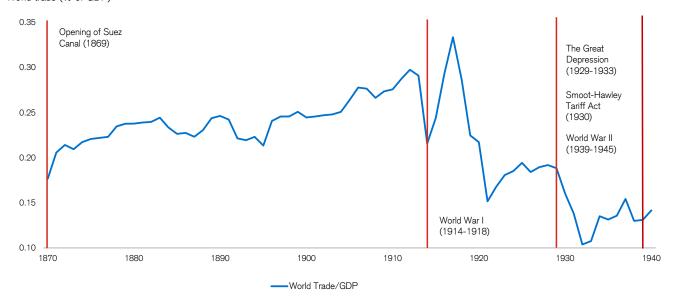
Source: Credit Suisse

inequality, immigration), a rise in protectionism, a geopolitical/military clash between the "great powers," currency wars, a climate event(s), the rise of broad-based "anti-globalization" political movements and a backlash against global corporations, or a reversal in transitions to democracy. The fact that Brexit and the Trump presidency have occurred against the views of the commentariat makes the above scenario less implausible.

Globalization scenarios	Globalization continues						
	Globalization continues		zation scenarios				
	Giobalization continues	A multipolar world	The end of globalization				
Trade and financial flows	Strong upward trend; increased integration and interdependency. Few interruptions from protectionism.	Rises at a slower pace, regional in nature. Regional and bilateral trade agreements.	Protectionism and barriers to trade increase.				
Markets	Low cost of capital; global shocks more frequent.	The rise of regional financial centers.	Fragmentation of global financial markets; a rise in the cost of capital.				
Currency	Dollar dominates.	The rise of new anchor currencies.	Currency wars and growing protectionist tendencies.				
Economic growth	Increasingly driven by trade growth. Low macro-economic volatility, except in times of crisis when risk of contagion is higher.	Lower growth; some regions thrive while others fall back. Regional setbacks in response to economic crisis. Emerging market consumer grows.	Domestic; slower. Tough times/recessions confined to centers of origin. Shocks from debt, inequality, climate and geopolitics.				
Corporations	Multinationals become more powerful.	Regional champions. EU thrives.	National champions dominate. Anti- multinational corporation sentiment rises.				
Global governance	Collaborative; supranational institutions dominate; USA a dominant force. Governance rules established by global regulators.	Competitive; regional hegemons; covert conflicts; spheres of influence. New institutions with exclusive memberships.	Open conflicts. Geopolitical military clashes. Climate events.				
Forms of government	Spread of democracy.	"Managed democracies" more entrenched. Governments focus on "nationalism," "nativism," promotion of "local content."	Reversals in transitions to democracy. Power consolidation among a few key countries.				
People flows	Open door policy for immigrants.	Increased restrictions on immigrants. Selective skill-based movement of labor. Rural-urban migration to domi- nate cross-country movement.	Breakdown of migration. Social exclusion of migrant population.				
Social and human development	Greater convergence in living standards, but less globalized regions fall back. Human development improves.	Living standards become more unequal. Local economies become wealthier in aggregate. In emerging market economies – rising consumer (incomes, consumption and wealth).	Increased poverty and civil strife. Rise of anti-globalization sociopolitical movements.				

Figure 1
The rise and fall of world trade: 1870–1940

World trade (% of GDP)



Source: Klasing and Milionis (2014) and Penn World Tables from ourworldindata.org, Credit Suisse

#### Replay of 1913

The first wave of globalization (1870–1913) was characterized by industrialization and productivity gains from the rise of new technologies (rail and shipping for instance). Here, the inauguration of the Suez Canal in 1869 undoubtedly boosted trade and commerce by shortening the East-West geographical distance, significantly lowering trade costs and easing the movement of goods. Further, with improved cross-border communication, the heightened movement of labor and capital was guick to follow and this drove down costs. Jacks, Meissner and Novy<sup>1</sup> (2010), calculated a substantial 33% decline in measured trade costs during the first wave of globalization. Financial integration and coordinated money regimes proved to be further catalysts for global trade. Increased acceptance and adherence to the Gold Standard boosted bilateral trade during this first wave<sup>2</sup>.

Brewing below the surface of the trade expansion story, however, was a strong sense of geopolitical competition. The weakening of empires (specifically the Ottoman Empire) and the scarcity of new imperial opportunities brought with it political rivalry and diplomatic friction, as the need to secure

The unification of Germany in 1871 gave it more economic clout. Having become an administratively larger single country, prospects of infrastructure development and economic growth were ripe. It was no surprise that the country recorded an industrial and technological boom in the years that followed. By 1900, Germany overtook Britain in steel production, securing a spot second only to the USA. Simultaneously, electrification boosted mass production capabilities in the USA. However, Britain continued its stronghold in the political arena. For instance, attempts by Germany to form an exclusive German-Franco-Russian bloc without Britain failed, although the German cartels widened their influence in the trade sphere. Unfair trade practices and the breach of commercial treaties led to the eruption of trade wars. On the other hand, Eastern Europe (Russia, Hungary, Austria and Serbia) was caught in a spiral of territorial tensions and ethnic strife. The build-up in antagonistic sentiment and political discord, particularly in Europe, became clear with the naval arms race between Britain and Germany and finally World War I.

both territory and influence grew stronger. The key here was the rise of Germany.

<sup>&</sup>lt;sup>1</sup> Trade Booms, Trade Busts and Trade Costs David S. Jacks, Christopher M. Meissner, Dennis Novy, NBER, October 2010

<sup>&</sup>lt;sup>2</sup> Exchange-Rate Regimes and International Trade: Evidence from the Classic Gold Standard Era, Ernesto López-Córdova and Christopher M. Meissner, The American Review, vol 93, no.1, March 2003

#### Consequences of an end to globalization

World War I (1914-1918) came as a significant shock to the global trade and growth outlook (see Figure 2). Although transport costs remained low even after the war, merchandise flows were disrupted by the adoption of activist trade policies and the steady erection of protectionist measures. The Great Depression (1929) was a major breaking point in the path of global economic integration. Specifically, the Smoot-Hawley Tariff Act (1930) in the USA was a decisive move in this direction, raising tariffs on imported goods to record levels. Protests from trading partners were rejected by the administration in the USA, eventually leading to the forging of other economic and trade ties as replacements (such as Canada-Britain and Britain-France) or partners resorting to autarky-type economic systems (Germany). The Act is also often credited with a bout of retaliatory and uncoordinated tariff revisions that not only stifled global trade, but also plausibly accentuated the severity of the Great Depression.

Although the interwar period also witnessed some efforts to restore international order and normalize trade relations, war debts kept financial conditions tight. Credit markets (particularly commercial credit and private international lending) had gone dry and economies resorted to inward-looking import-substituting industrialization. Foreign capital and investments, especially those to developing economies in core traditional sectors such as railways, began to retrace during this period and exacerbated a broadly uneasy trade environment.

1871

1874

1877

1880

1883

1886

Trade

1889

The narrative of the first wave of globalization appears to rhyme with the second wave of globalization, which effectively dates from the early 1990s, when events such as the fall of communism, rounds of trade liberalism and the growing momentum of the Chinese economy accelerated globalization. The initial or golden years of the second wave were marked by the formation of the European Economic Community and eventually the monetary unification of countries in the EU. This produced similar and perhaps greater trade-boosting effects than the Gold Standard. While the Gold Standard introduced a clearly defined element of reciprocity and coordination in cross-border trade; the Eurozone further unified payment systems through a common currency, thereby eliminating foreign exchange volatility and transaction costs for a significant group of European economies. The financial crisis of 2008-2009, on the other hand, has played a similar role to disruptive events such as the world wars and the Great Depression that had previously broken the rhythm of globalization.

Economic expansion and disruption in the first wave of globalization
Indexed, 1871=1.00
3.0
2.5
2.0
1.5

Note: Trade and GDP values calculated based on Western Europe, western offshoots and Japan. Shaded portion highlights the sharp breakdown in the first wave of globalization. Source: Shiller Data, Angus Maddison Database, Klasing and Milionis (2014), ourworldindata.org, Credit Suisse

1892

GDP per capita

1895

S&P 500 composite

1904

1907

1910

1913

#### Secular stagnation still a risk

Drawing a parallel between the two waves of globalization naturally leads us to the question: "is another breakdown in globalization imminent?" Here we highlight three key trends that were also observed in the past as prime drivers for the collapse of the first wave of globalization.

First among these is demand weakness and stagnant output growth. In the last eight years, the global economy has been severely battered by the 2008-2009 financial crisis and double-dip recession in Europe. Although we do acknowledge that recovery is underway, the pace of recovery remains slow and insufficient to return to its prior trend level, especially as demand from China has faltered in recent times. A parallel here is World War I, which destroyed both production and demand, inducing a sharp reduction in economic growth, trade and financial market performance, and bringing about an end to the first wave of globalization. We thus continue to see depressed demand (both consumer and investment demand) coupled with subdued output growth as risk factors for global trade flows and globalization in a broader sense.

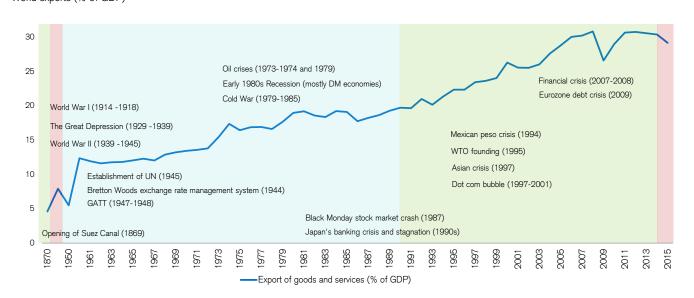
Second is a constrained policy and operating environment. Literature around globalization has explored and asserted that trade patterns have been influenced by a combination of global commercial strategies, the prevailing diplomatic environment, the institutional framework and changing sociocultural perceptions. With conventional establishment politics being challenged across the globe, the need for policymakers to focus on domestic issues has become a pressing matter and, to that extent, we are potentially at a turning point of foreign policies, particularly those relating to trade.

And, last but not least, comes the rise in protectionism and import substitution. Domestic-oriented trade policies appear to be steadily gaining ground as economies seek to boost employment and economic activity within borders. Global value chains are likely to transform as governments emphasize increased local content requirements and multinationals face tough competition from more regional champions.

Figure 3

The two waves of globalization

World exports (% of GDP)

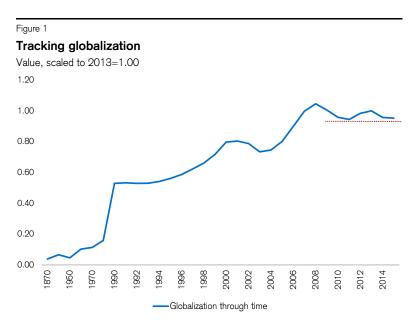


Note: Areas shaded in green are indicative of periods when globalization was thriving, areas shaded red show time periods of faltering globalization and area shaded in blue is a period of interlude when globalization faced a mixed yet rocky path of expansion and roadblocks. Source: World Bank, WTO, OECD, Credit Suisse



# Globalization stalling at a high altitude

Some think that globalization can continue in much the same way as the past twenty years. Recent events and a slowing in the trend rate of international growth suggest otherwise. In this section, we measure the extent to which globalization has slowed and how multipolar the world has become.



Source: World Bank, Thomson Reuters DataStream, SIPRI, Credit Suisse

Table 1

CS Globalization Index

Rank	Country	Size	Score	
1	Luxembourg	S	0.96	
2	Hong Kong SAR	S	0.85	
3	Singapore	S	0.85	
4	Switzerland	S	0.83	
5	Hungary	S	0.80	
6	Belgium	М	0.80	
7	Ireland	S	0.79	
8	Netherlands	М	0.75	
9	Denmark	S	0.73	
10	Iceland	S	0.73	

Note: Economic globalization: Trade openness (% of GDP), FDI (% of GDP), FPI (% of GDP). Social globalization: Cellphone subscription (per 100 people), telecom lines (per 100 people), remittances (inward + outward) (% of GDP). Technological globalization: Internet users (per 100 people), secure servers (per million people). Source: Credit Suisse

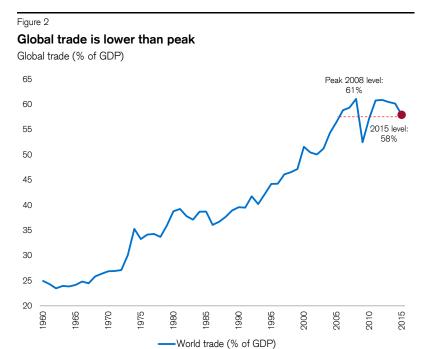
Globalization is running out of steam. We can see this in various ways. Our measure for tracking globalization – made up of flows of trade, finance, services and people – has ebbed in the past year, and has slipped backwards over the course of the past three years so that it has dropped below the levels reached in 2012–2013 to about the same level as crisis-ridden 2009–2010 (see Figure 1). Perhaps the most basic representation of globalization is trade, and this is sluggish or according to many measures it is plateauing.

An examination of trade in goods and services as a proportion of world Gross Domestic Product (GDP) shows that trade activity is flattish (see Figure 2), although again at a high level. In the course of the last six years, trade has rebounded from the global financial crisis and again attained the level reached in 2008–2009, which historically is the highest level of at least the last 50 years. This leads to the impression that trade, and by extension globalization, has reached its upper limit.

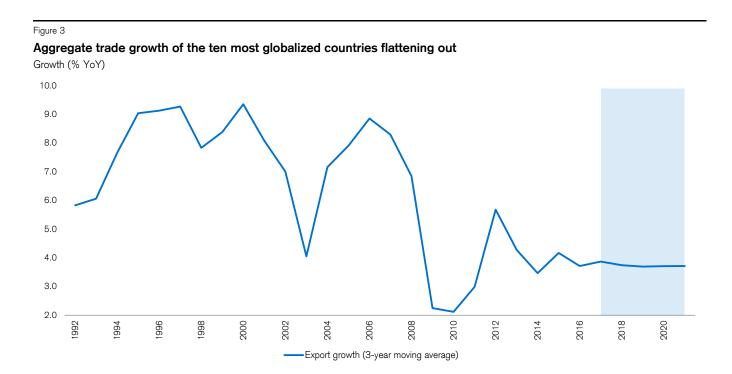
In this context, we highlight the CS Globalization country rankings which were first constructed in 2014 and are based on economic, social and technological factors (see Table 1). The rankings are led by smaller, open European economies with Singapore and Hong Kong SAR also prominent. However, we should also flag here that some small countries which act as trade or financial entrepots (e.g. Luxembourg and Hungary) have very heavy finance flows relative to their GDP and as such appear intensely globalized in the economic sense.

Looking at trade growth for the top ten most globalized countries (based on the CS Globalization Index of 2015), the picture also shows that trade growth is plateauing and at not-so-encouraging levels (see Figure 3). Another way to consider the pace of globalization is to look at the aggregate activity in the world's most open globalized economies. If we add together the GDP for the likes of Ireland, Switzerland, Belgium, Singapore and the Netherlands - generally small open economies (we have taken the aggregate of the ten most globalized economies as per the CS Globalization Index of 2015) that in many respects are the canaries in the coalmine of the world economy, we see that their growth is slowing, and is below the trend of what they had enjoyed over the course of the past 20 years (see Figure 4).

Other indicators of globalization paint a more negative picture – cross-border flows of financial assets (relative to GDP) have continued downward from their pre-financial-crisis peak, most likely because of the effects of regulation and the general shrinking of the banking sector. Trade liberalization, as measured by the Fraser Institute's economic freedom of the world indices, has been slowly declining since its peak in 2000, although it is still at a relatively healthy level.



Source: World Bank, Credit Suisse



Note: The top ten countries (based on the CS Globalization country ranking) include Luxembourg, Singapore, Switzerland, Hong Kong SAR, Belgium, Ireland, Netherlands, Denmark, Iceland, and Korea. IMF forecasts till 2021, indicated by shaded region. Source: IMF, Credit Suisse.

There are several reasons why trade has diminished – a shift in economic structure in China means that fewer capital-expenditure-driven goods are traded, technology has enabled western companies to relocate operations back to their own countries (nearshoring), and that many goods are less capital-investment heavy. Weak demand from the Eurozone in the past four years has not helped either.

Our indicators also show that remittances have slowed, although the communications aspect of globalization is very much alive. Migration and more generally people flows are harder to measure and are reported with a considerable lag. But some sub-trends are worth noting – in the USA for instance, the number of migrants as a proportion of the population rose significantly from 9.2% in 1990 to 13.3% in 2005. The decade to 2015 ended with the stock of migrant population reaching a peak of 14.5%, but at a much slower pace than earlier.

At this stage, observers of globalization might well conclude that it is pausing for breath, or that it is in a transition phase as new technologies and new economic actors emerge. This may prove to be the case, but we are worried by rumblings in the engine room of globalization. These suggest that the plateauing in globalization may be more structural than cyclical, and to some extent reminiscent of some of the behavior seen in the early 20th century. Recent political developments (for example the US presidential debates were peppered with antitrade agreement rhetoric) provide the dangerous catalysts for a shock to globalization.

#### Cutting up the globalization pie

First, the sense that globalization and trade have stopped growing is fueling a narrative that the globalization pie has stopped expanding, and that the debate on globalization is really now about who gets the slices of the globalization pie and how large and tasty these need to be.

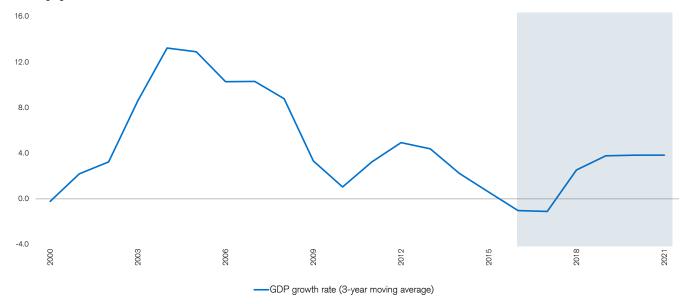
This approach introduces a beggar-thy-neighbor element to the conversation on globalization. Instead of proposing ways in which globalization can thrive or grow in a more sustainable way, many countries, politicians and commentators propose ways in which to borrow, reclaim or takeover somebody else's slice of the pie. This change in the political and economic climate is betrayed by the difficulty in concluding any trade agreements.

The falter of both the Trans-Pacific Partnership (TPP) between the USA, Japan and a group of Asian countries (notably China was not included) and the Transatlantic Trade and Investment Partnership (TTIP) between the USA and the EU to gain approval re-emphasizes this point. Indeed, there has not been a major international trade agreement since the General Agreement on Tariffs and Trade (GATT) Doha Trade Round in 2001. Before that, the 1990s were replete with tradefriendly agreements – the establishment of the World Trade Organization (WTO), the EU single market taking effect in 1993 and then the process of the creation of the euro.

Figure 4

Flattish GDP growth of the top ten most globalized countries to challenge globalization trajectory

Percentage growth



Note: Top 10 countries (based on the CS Globalization country ranking) include Luxembourg, Singapore, Switzerland, Hong Kong SAR, Belgium, Ireland, Netherlands, Denmark, Iceland, and Korea. IMF forecasts till 2021, indicated by shaded region. Source: IMF, Credit Suisse.

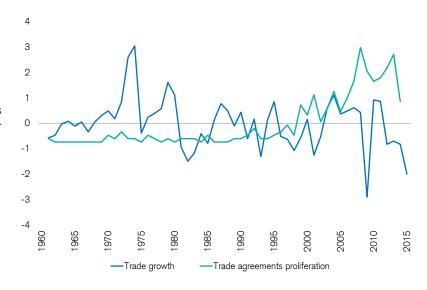
Perhaps the closest we have come to a traderelated agreement in recent years was the tacit agreement between governments and central banks of the large economies (at the February 2016 G20 meeting) not to aggressively weaken currencies. Since then foreign exchange volatility has fallen sharply, and, before then, the actions of central banks such as the European Central Bank and the Bank of Japan to dramatically weaken their currencies could be interpreted as forms of "beggar thy neighbor" or protectionist policies.

In areas where there is scope to gain efficiencies and scale in terms of greater and better trade under the auspices of existing trade agreements, some countries are holding back in terms of implementation. There is also a creep toward more overt, traditional protectionism. The Global Trade Alert (www.globaltradealert.org), coordinated by the Centre for Economic Policy Research, monitors the extent to which policies liberalize and restrict trade and notes that, of the measures implemented to "protect" trade, trade-defense measures and bailouts/state aid are by far the most popular device, followed by import tariffs and trade finance.

Figure 5

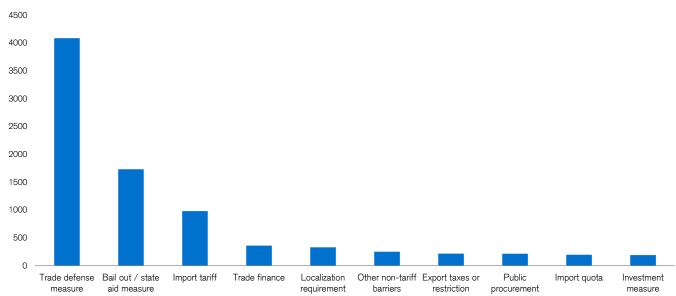
#### Trade and trade agreements becoming less attractive as growth drivers

Trend plot (measured by z-scores)



Source: World Bank, WTO, Credit Suisse

The most popular trade restrictions Number of trade measures 4500



Source: Global Trade Alert, Credit Suisse

#### Beware of protectionism

Interestingly, it is the USA that appears to implement the greatest number of trade protectionist measures (these outnumber trade liberalizing measures by a factor of nearly nine to one), followed by Russia and India (India and Brazil have implemented the greatest number of trade liberalizing measures). It is also worth commenting that the UK, Spain, Germany and France have each implemented more traditional trade protection measures than China.

Other forms of protectionism are also on the rise. The EU and the USA have been engaging in apparent like-for-like fines of each other's national champions. Specifically, vulnerable European institutions (i.e. banks like Deutsche Bank) and cashrich US companies (tech giants like Apple and Google) have been raided by the respective Atlantic "partners," with fines now coming to USD 14 billion according to the Finanical Times.

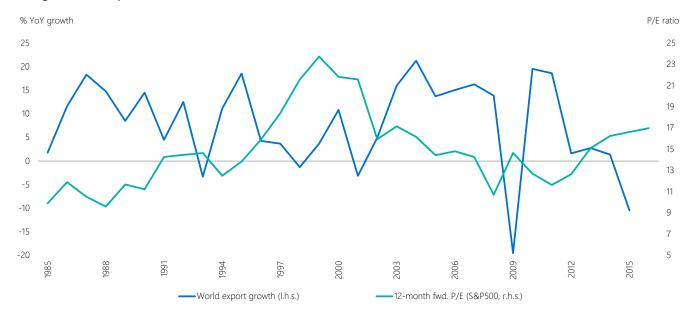
In the context of financial markets, we note the presence of a "globalization premium" in US equity markets that has made them more expensive from a valuation standpoint (see Figure 7). A decline and indeed contraction in world trade growth has been accompanied by a contrasting rise in 12-month forward price-to-earnings expectations, reflecting the constraints in foreign sales and underlying profit margins faced by multinational corporations in recent times.

In summary, the level of globalization and its component parts are dropping from a high point, the pace of improvement has ground to a halt and, in places, globalization is beginning to "eat itself" as countries and companies compete for what they now perceive to be a "fixed" pie of globalization.

An important element we find missing in many of the discussions on globalization is what comes next? Instead, commentators seem to want to choose between "thriving globalization" and "the end of globalization, with catastrophic consequences." In our view, the apparent slowing of globalization is a transition phase, from full liberalized globalization to a more frictioned multipolar world.

Figure 7

The "globalization premium"



Source: World Bank, Thomson Reuters DataStream, Credit Suisse



## The road to multipolarity

One of the notable sub-trends of globalization has been a much better distribution of the world's economic output, led by what were once regarded as overly populous, third world countries such as India and China. This has fueled multipolarity – the rise of regions that are now distinct in terms of their economic size, political power, approaches to democracy and liberty, and their cultural norms.

Multipolarity is seen most easily in economic terms, with the steady shift eastward in the economic center of gravity of the world to an extent that some writers now describe a process of "easternization"<sup>3</sup>.

Our index of multipolarity, which measures the extent to which trade, GDP, foreign direct investment, budget size and population are concentrated in specific regions, shows that the world is much less concentrated, or more multipolar, than it was in the 1980s – when a great deal of economic power was concentrated in the USA and Western Europe.

The extent of multipolarity has grown steadily in the past two decades, driven principally by the rise of China, with our index peaking in 2012. The current level of multipolarity is just below that now. Four of the five component parts of the multipolarity index are still close to historic lows (i.e. much less concentrated), with budget size having become slightly more concentrated (plausibly driven by a run-down in fiscal space in emerging countries on the one hand and, more recently, some improvement in the US and EU fiscal situations).

One exception is finance, which remains dominated by the USA in terms of the effect that US equity and bond markets have on other markets, and also in terms of the usage of the dollar (nearly 90% of transactions globally (87.6% in 2016) compared to 31.3% for the euro, 21.6% for the yen, 12.8% for the pound and just 4.0% for the Chinese renminbi) according to the Bank for International Settlements<sup>4</sup>.

It should be said that the extent of globalization/multipolarity is still at a historically high level, although it is hard not to have the impression that it is on the verge of a downward correction, especially once we consider some of the underlying dynamics.

#### What is multipolarity?

An interesting and intuitive way of seeing how the world has evolved from a unipolar one (i.e. USA) to a more multipolar one is to look at the location of the world's 100 tallest buildings. The construction of skyscrapers (200 meters plus in height) is a nice way of measuring hubris and economic machismo, in our opinion. Between 1930 and 1970, at least 90% of the world's tallest buildings could be found in the USA, with a few exceptions in South America and Europe. In the 1980s and 1990s, the USA continued to dominate the tallest tower league tables, but by the 2000s there was a radical change, with Middle Eastern and Asian skyscrapers rising up. Today about 50% of the world's tallest buildings are in Asia, with another 30% in the Middle East, and a meager 16% in the USA, together with a handful in Europe. In more detail, three-quarters of all skyscraper completions in 2015 were located in Asia (China and Indonesia principally), followed by the UAE and Russia. Panama had more skyscraper completions than the USA.

<sup>&</sup>lt;sup>3</sup> See "Easternisation: War and Peace in the Asian Century," Gideon Rachman. Bodley Head, August 2016.

<sup>&</sup>lt;sup>4</sup> Estimates provided in the Triennial Central Bank Survey of foreign exchange turnover in April 2016 released in September 2016.

Figure 1

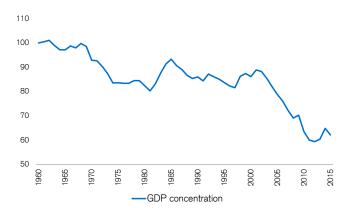
#### From concentration to multipolarity (top 30 countries)

Plotting Index values

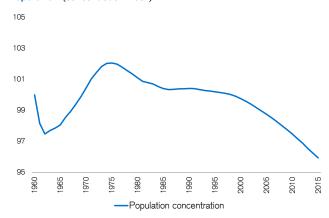
Trade (concentration index)



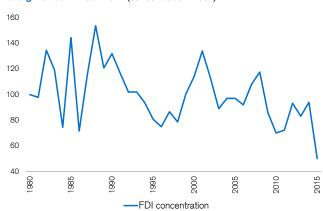
Gross Domestic Product (concentration index)



Population (concentration index)



Foreign direct investment (concentration index)



Source: Credit Suisse

We see multipolarity evolving in other ways, notably in the areas of military power, political and cyber freedom, technological sophistication, financial sector growth and in a greater sense of cultural prerogative and confidence. Many of these variables are not as easily measured as economic multipolarity, but some clear strands are emerging.

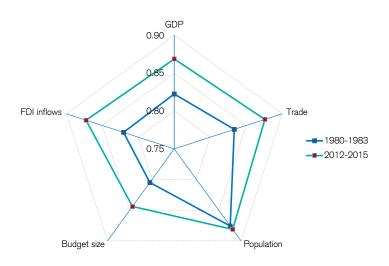
There are three significant and easily identifiable poles emerging: the USA or perhaps more broadly the Americas, Europe and then China-centric Asia. Latin America should, given its population and geographic size, constitute some form of pole. But, in the areas of foreign policy, military power, financial sector mass and ability to innovate, it falls behind other regions. Also to a large extent with the rise in the Hispanic population in the USA, the détente between the USA and Cuba and the primacy of the dollar, Latin America remains part of the satellite region of the US pole.

#### Mapping our different poles

Our analysis of globalization and multipolarity has emphasized the changing dynamics of world order - steadily moving away from European-US hegemony to a more regional power-play story. While some countries like the USA have managed to hold a spot in the list of "influential poles" over time, there has undoubtedly been tough competition with expected alterations in the distribution of power. In keeping with the multi-dimensional nature of our analysis thus far, we further try to quantitatively capture the relative strength of ten select countries and two groups of countries - a representative euro area (made up of Germany, France, Italy and Spain) and a set of selected small developed countries - which we believe qualify to be termed as "poles."

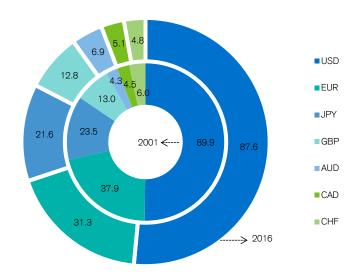
Figure 2

#### Multipolarity across key variables



Source: World Bank, Thomson Reuters DataStream, Credit Suisse

Figure 3 **Dollar dominance strong, but multi-currency patterns emerging**Currency distribution of OTC FX turnover (percentage shares of average daily turnover)



Source: BIS, Credit Suisse

We score our selected countries on a 5-point scale to display their relative strength as an influencer or pole based on five broad criteria:

- Economic size measured by GDP, GDP per capita and the depth of financial markets measured by the credit to GDP and market capitalization of listed companies to GDP ratios.
- Hard power measured by a country's military capabilities (i.e. number of aircraft, tanks, armored fighting vehicles, naval strength, etc.) and defense budgets/spending, which is an indication of a country's military commitments.
- Soft/diplomatic power captured by a country's climate sensitivity (CO2 emissions in kg per 2011 purchasing power parity (PPP) dollar of GDP), its ease of doing business, health expenditure per capita, skill base and capabilities development (the number of researchers and expenditure on research and development as a percentage of GDP) as well as scores of human development and technological advancement.
- Governance quality and distinctiveness captured by the six sub-components of the World Bank's worldwide governance indicators; namely voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption.

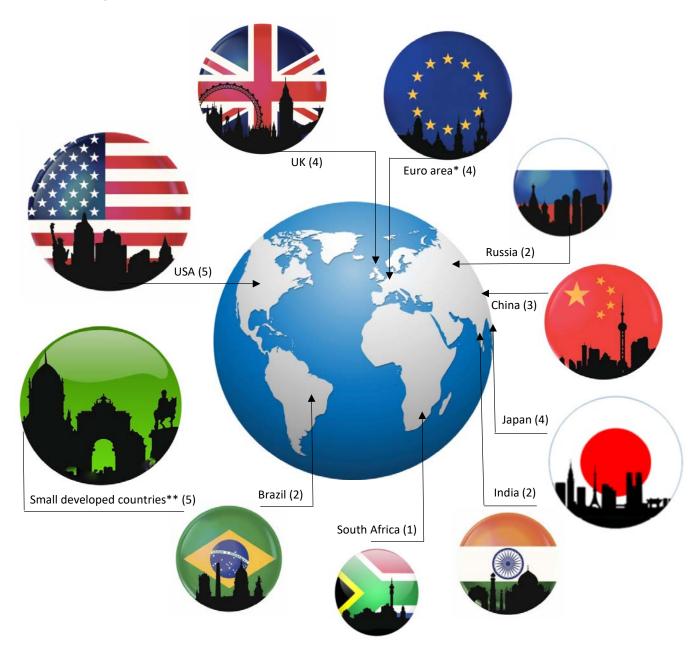
We note that we are taking a more westernized view of multipolarity in this analysis, partly for reasons of data availability. When we rank some emerging countries on the strength of their institutions and governance, we are using measures that take a western point of view – and may not pick up the distinctiveness of say the Chinese approach to governance.

Our analysis shows that legacy power players such as the USA, the UK and Japan continue to dominate, scoring relatively higher on most indicators (see Figure 4). However, we see Japan increasingly losing steam here, given that the country continues to be challenged by a massive and tough economic rebalancing effort. The performance of the small developed countries group is noteworthy, plausibly offering competition to larger powers. Larger growing emerging markets (Russia, India, Brazil, Chile and South Africa) are identified as poles that are significant but have yet to realize their full potential.

Figure 4

#### Mapping pole strength

Score of 1-5; 5 = highest, 1 = lowest

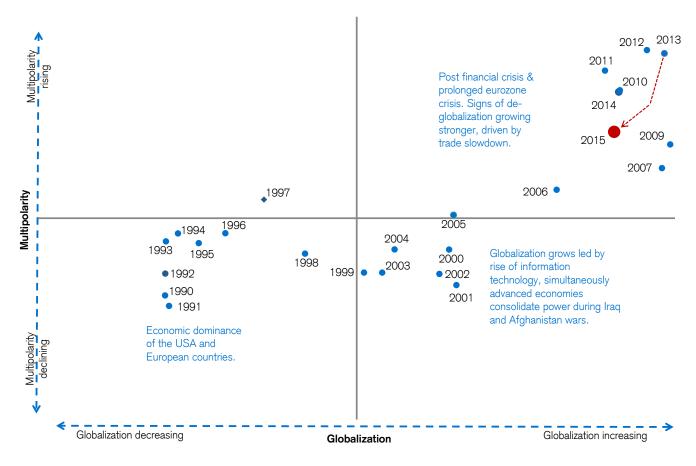


<sup>\*</sup> Representative euro area including Germany, France, Italy and Spain

<sup>\*\*</sup> Luxembourg, Singapore, Switzerland, Hong Kong SAR, Belgium, Ireland, Denmark, Iceland Source: Credit Suisse

Figure 5

The Credit Suisse Globalization Clock: Retracing levels



Source: World Bank, Thomson Reuters DataStream, SIPRI, Credit Suisse

#### The Globalization Clock

Drawing together our multipolarity and globalization indicators, we construct the CS Globalization Clock, which we first published in our September 2015 CSRI publication on the "End of Globalization or a multipolar world?". Trends in globalization and multipolarity are captured by indicators such as trade, foreign investment flows, migration, debt and military spending. From a mathematical point of view the treatment of these variables differs in order to capture globalization via growth rates and multipolarity via share in totals. The Globalization Clock plots globalization and multipolarity scaled against their long-term averages.

Some clusters are clearly visible and match historical events. For instance, the early 1990s were dominated by the USA and European countries, followed by a phase of low globalization and low multipolarity during the period 2000–2005, driven by the growth of information technology and the consolidation of military power by major advanced countries during the Iraq and Afghanistan wars. Since then, the world has moved into the first quadrant of

the Clock – a sweet spot – to become more globalized and more multipolar at the same time, accentuated by the economic weakness of developed economies and stronger emerging market economies. However, the Globalization Clock very distinctly shows that globalization has retraced in 2015, from its high in 2012–2013, a risk we highlight in this report. While, the Clock also shows that multipolarity has edged back as well, we note again that the independent components of our multipolarity index still show a low level of dispersion (trade and GDP are marginally more concentrated, see Figure 1). We believe today's world continues to gravitate toward the evolution of distinct "poles."

#### **End of Globalization Risk Scorecard**

In our September 2015 report on "The End of Globalization," we introduced a risk scorecard (see Table 1). Given that many of these risks are becoming more acute and that they appear to be triggering political change, we elaborate on them in this section. Today, many people will feel that the world is turned on its head – property ownership and wealth inequality are live issues in many countries, and in other nations there are hopes of greater representativeness. However, political trends suggest a great deal of "anomie," which seems to come from different sources.

Table 1 The End of Globalization Risk Scorecard 2016 Ranging from red through orange, yellow, light green to dark green (red = highest risk, dark green = lowest risk)

Country	Military	Polity	Incor	ne Non-tari	ff Migrant	Debt
	spending		inequa	ality barriers	s stock	
United States	-0.88	• 10.00	<b>2.74</b>	-0.07	<ul><li>1.57</li></ul>	<ul><li>1.50</li></ul>
Canada	-1.32	10.00	-0.47	0.37	<b>1</b> .99	-0.67
North America	-1.08	• 10.00	1.23	0.04	• 1.77	<ul><li>1.37</li></ul>
United Kingdom	-1.41	0.00	2.33	-0.78	2.28	<b>2.15</b>
Germany	-1.06	• 10.00	2.02	-0.15	<b>1.29</b>	<ul><li>1.43</li></ul>
Italy	-3.13	• 10.00	1.80	-0.16	<b>2.39</b>	1.94
France	-1.52	9.00	1.52	0.01	<b>1</b> .94	• 1.81
Spain	-0.48	10.00	1.65	-0.81	<b>1</b> .76	• 2.25
Switzerland	-1.27	10.00	-2.78	<ul><li>1.38</li></ul>	<b>2.41</b>	
Ireland	-1.31	10.00	2.48	0.00	<ul><li>1.41</li></ul>	1.82
Russia	<b>2.97</b>	4.00	<b>1</b> .91	0.33	-0.15	-0.31
Europe	-2.08	10.00	0.21	-0.58	<ul><li>1.87</li></ul>	
Australia	0.04	0.00	2.45	-0.03	<b>2.82</b>	<b>2.08</b>
Japan	0.81	10.00	-1.28	0.62	<b>1.49</b>	• 1.31
China	-0.49	-7.00	2.04	<ul><li>1.66</li></ul>	• 2.83	
India	-1.50	9.00	1.98	0.84	-1.22	-0.60
Asia	-0.91	7.00	<b>2.31</b>	0.38	<b>2.97</b>	
Brazil	-0.53	8.00	<ul><li>1.65</li></ul>	0.37	-0.94	-0.07
Latin America	-1.36	8.00	-0.25	-0.14	-0.94	
Middle-East	-0.22	-7.50	• 1.41	• 1.22	0.45	
EM	-1.77	4.00	0.49	<b>1.07</b>	1.28	-1.34
DM	-2.10	10.00	0.54	-0.03	<b>1.73</b>	<ul><li>1.88</li></ul>
World	-0.92	8.00	<b>1.79</b>	0.48	<ul><li>1.87</li></ul>	<ul><li>1.37</li></ul>

Source: World Bank, SIPRI, Center for Systemic Peace, CS Wealth Report, Credit Suisse

- 1. Military spending (% GDP): Time series data from 1988, giving an overview of military expenditure of over 175 countries. Z-score method to draw out changes observed through time in the variable for each country. Source: Stockholm International Peace Research Institute
- 2. Polity data: Time series data from 1800, defining the state's level of democracy. Changes in scores over the past decade and a half have been focused on to observe the transient nature of democracy in certain countries. Source: Center for Systemic Peace
  3. Wealth inequality: Time series data from 2000 elucidating top-decile wealth share, used as a proxy for studying wealth inequality in major countries. Source: Credit Suisse Wealth
- 4. Non-tariff barriers: Number of non-tariff barriers imposed since 1990 by around 140 countries. Source: UNCTAD
- 5. Migrant stock (% population): International migrant stock as a proportion of domestic population. Source: World Bank
- 6. Central government debt (% GDP): Time series data since 1990 to ascertain the level of government debt across countries/regions. Source: World Bank

Figure 6

Stock of international migrants

Percentage of total population

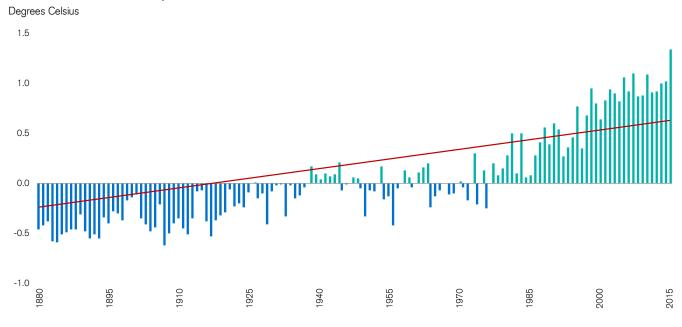
Source: World Bank, Thomson Reuters DataStream, Credit Suisse

Changes in work practices exacerbate this for many, as does the multiplication of stresses that comes from competition for schooling and lack of access to good affordable healthcare. One startling way in which the "world we are used to" is slipping away is in our bodies. The last ten years likely represents the biggest change in human body form and skeletal activity since the 19th Century. Think of how body shapes are changing - obesity is a huge threat to western, Arabian and Latin American societies as diets change. Kuwait is estimated to have an alarming share of over 42% of its population obese, with the USA (close to 40%) and Mexico (around 32%) not too far behind. On balance, people exercise less, and when they do employ their body in work, it is in the hunched form of the "texter," which is producing a multitude of new skeletal and repetitive strain injuries.

In other domains, some trends that have been associated with globalization - migration being one have extended to levels that now breed resistance. Climate change is perhaps a better example. Of the past fifteen years, ten have registered "hottest ever" temperatures (see Figure 7) and there is a growing number of climate-driven disasters and accidents. Irregularities in the flowering of plants and trees and the migratory patterns of animals and birds help to confirm the sense that all is not as it should be. Plenty of other factors match the "heat" in the climate for their extremity relative to history - negative interest rates and low bond yields, near-record indebtedness (as a proportion of world GDP), speed of impact of new technologies on everyday life and economies (e.g. penetration) are a few of these factors.

Figure 7

Global land and ocean temperature anomalies



Other factors, such as economic growth are in line with long-term historic averages, but are low for the current "globalization" generation. In our previous "End of Globalization" report, the two most-pressing threats to globalization were inequality and migration, both of which are now prominent political issues.

Inequality is now a preoccupation of the global elite - the International Monetary Fund (IMF), World Bank, McKinsey Global Institute - which all profess alarm that it is so high. This sympathy for the dispossessed may have several motivations, not least is the popular reception of French economist Thomas Piketty's 2013 book on inequality "Capital in the 21st Century," which has managed to stir interest in an arcane topic. Most evidence on inequality, much of it based on the Gini coefficient (a measure of statistical dispersion representing the income distribution of a nation's residents), comes with a lag so that the true magnitude of this issue is still hard for academics to grasp. A good deal of the evidence shows that inequality has not so much exploded in recent years (in the USA, it may even be dipping down from high levels), but has persisted at historically high levels.

Evidence from a range of sources, such as the World Bank<sup>5</sup> and Branko Milankovic<sup>6</sup> shows that, in general, inequality in the developed world is high, with the USA in pole position in this respect, with over 45% of aggregate income held by the top 20% – further accentuated by the top 10% group, which holds over 30% of the country's income. Some of this is driven by high executive pay, which across the range of industries in the US averages 300 times the pay of the average worker<sup>7</sup>. Among other countries, Sweden has become slightly less equal, although its Gini coefficient is nonetheless at a very low level, France has become more unequal and is now as "income unequal" as the UK, where inequality has declined somewhat.

In the developing world, the picture is somewhat different, reflecting Milankovic's assertion that, while inequality has in many cases increased within countries, it has narrowed when "between-country" relationships are accounted for. Here the positive effects of globalization are most clear in the sense that it has lifted hundreds of millions out of poverty to relative prosperity or well-being. Countries that "rise" typically display large levels of inequality early on and, as prosperity broadens, inequality tends to fall. More generally in the last twenty years, wealth and incomes have exploded in many emerging countries so that sensitivity to inequality is lower.

At the same time, we suspect that the sensitivity to inequality in the developed world has heightened for a number of reasons – persistent inequality

Figure 8

#### The average American is worse off than a decade ago

Percentage change in real US GDP per capita from a decade earlier



Source: Federal Reserve Economic Data (FRED), Credit Suisse

causes people to form permanent views about the state of the world and the relative justice of this, real incomes have until very recently (in the USA at least) stayed low and this has manifestly hurt purchasing power, and finally many people have not participated in the rise in asset values seen in the post crisis era. In fact, with large pension deficits mounting, inequalities may now be carried into the future. However, income inequality is only half the picture. Wealth is perhaps a more important metric, as it captures access to capital among other factors. In the Credit Suisse Research Institute's Global Wealth Report (November 2016), we find that the wealth of the top 1% amounts to 50% of all household wealth, which is close to the historical high.

Another striking way of examining how the "average person" is faring compared to previous generations is to measure his/her real income compared to what it might have been ten years earlier to get a sense as to how incomes are growing. In Figure 8, we show real per capita income in the USA relative to where it was ten years ago. The data shows a sharp decline in recent years (perhaps the baby boom generation was too well paid in the 2000s) to the extent that growth in per capita real income today is easily the lowest it has been in over sixty years.

<sup>&</sup>lt;sup>5</sup> http://www1.worldbank.org/poverty/visualizeinequality

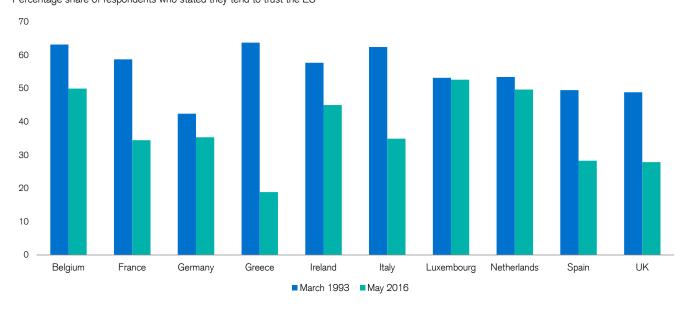
<sup>&</sup>lt;sup>6</sup> "Global Inequality," Harvard University Press, 2016

<sup>&</sup>lt;sup>7</sup> http://www.epi.org/publication/ceo-pay-continues-to-rise

Figure 9

Trust in the EU

Percentage share of respondents who stated they tend to trust the EU



Source: Eurobarometer (European Commission), Credit Suisse

This is a useful way of picking up the sense that people feel much less well off, especially in the case of those who may have been working long enough to recall periods of stronger income growth.

#### Globalization and its discontents

In Europe, there has been a marked and apparently structural decline in trust in the EU. Comparing EU citizens' attitudes to the EU between 1993 and 2016, we find that Greece's trust in the EU has dropped from over 60% to 15%, while in both France and Germany it now lies in the mid-30s (see Figure 9). In Spain, trust in the EU is at the same level as in the UK, having nearly halved since 1993 (48% to 27%) according to Eurobarometer EU public opinion surveys. Similarly, pessimism in the EU has risen sharply in the past nine years. In 2007, less than 20% of people in European countries were pessimistic about the EU, but this figure has now risen to close to 40%, led by the likes of Germany and France. That said, Eurobarometer polls show that the majority of citizens in Eurozone countries would stay "in" if they were offered a UK-style referendum.

Europeans are more cynical or less trusting when it comes to politicians. In 2000, a healthy average of 65% of Europeans distrusted political parties. This figure has now risen to close to 90% in France, Greece, Spain and Portugal. Only the Danes and the Dutch still have a modicum of trust in politics, while Swedes and Finns have become

modestly more trusting of political parties than they used to. Specifically, few European leaders are spared the pessimism of their citizens. For instance, former Italian Prime Minister Matteo Renzi and French President Francois Hollande have low approval ratings (30% and 16%, respectively).

Reinforcing this is a generalized sense of disinterest in politics across European countries, which is odd in the context of the economic stresses on the EU and its member states and the consequence of a number of national elections. In Italy, Greece, Germany, France and Spain, voter turnout has been the lowest in the past sixty years, having dropped discernibly in the past twenty years. For instance, in France in the early 1970s, turnout was 80%, dipping toward 60% in 2000 and now close to 52%. Of the major western economies, only the USA has seen a rise in voter turnout in the last 20 years.

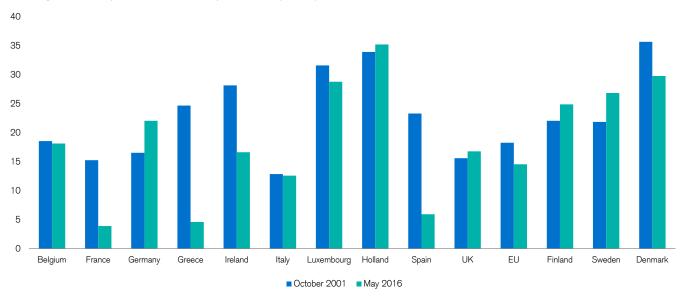
In the USA, several Pew Research Center studies also reflect this. The "American Middle Class is losing Ground" report<sup>8</sup> highlights the "squeezed middle" where the number of people considered to be "middle class" (roughly 120 million people) is now outnumbered by the combined lower and upper classes and, importantly, the share of total income of the middle class has fallen from 62% in 1970 to 43% in 2015 (see Figure 11). Independently, the 2015 Credit Suisse Research Institute Wealth Report found that America's wealthy middle class (close to 92 million people) is now surpassed by the estimated number of Chinese middle class.

<sup>&</sup>lt;sup>8</sup> http://www.pewsocialtrends.org/2015/12/09/the-american-middle-class-is-losing-ground

Figure 10

Trust in European political parties

Percentage share of respondents who stated they tend to trust political parties



Source: Eurobarometer (European Commission), Credit Suisse

The old political order in the developed world is causing either apathy (as evidenced by lower turnout), rage or political entrepreneurship. Reflecting this, the last five years have seen a jump in the formation of new political parties across Europe, from five in 2010 to 14 in 2015. Of these new parties, several are emerging on the right-hand side of the political spectrum, joining other established right-wing parties such as France's Front National and the UK Independence Party (UKIP) and contributing to a new political phenomenon whereby right-wing parties are garnering a rising share of voter support. It is not unusual for right-wing parties to have 20% or more of the vote across a range of European countries.

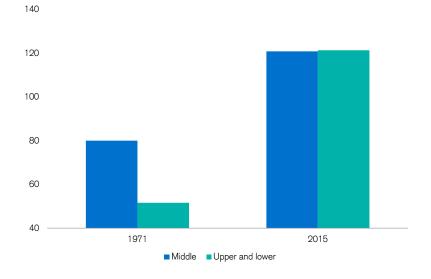
#### Debt is rising fast

One of the areas identified in our "End of Globalization" Risk Scorecard is rising indebtedness, which should come as a surprise in the aftermath of the global financial crisis, but at the same time is less shocking in the context of extreme low interest rates. The latest IMF Fiscal Monitor highlights the fact that global debt is now USD 152 trillion, or 225% of global GDP – this is higher than the peak reached before the global financial crisis. The IMF study provides a useful breakdown of where debt has increased. In many countries, the private sector is still in the deleveraging process (led by the UK), although its indebtedness has risen in aggregate.

Figure 11

Middle income Americans are no longer in the majority

Adult population in USA, by income (millions)



Source: PEW Research (December 2015), Credit Suisse

Figure 12

The income share of middle-income households has also dipped

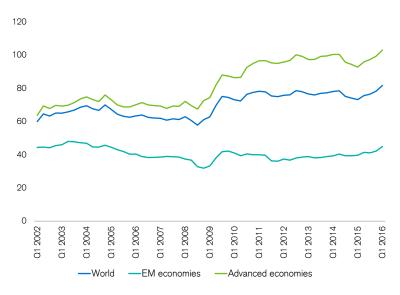
Percentage of US aggregate household income

70
60
50
40
30
20
10
0
Upper
Middle Lower

Source: PEW Research (December 2015), Credit Suisse

Government debt burden continues to grow in developed economies

Percentage of GDP



Source: BIS, Credit Suisse

The increase in indebtedness of developed economies is worrisome, as the share of government debt to GDP for advanced economies has continued to rise.

#### Migration is still an issue

Migration has become one of the most contentious facets of globalization. In particular, forced migration has become a grave political and geopolitical question. The Syrian crisis has displaced 12 million people, which dwarfs crises such as those in Rwanda and the former Yugoslavia.

Today, the global migrant stock (as a proportion of total world population) is at its highest in 25 years (3.3% in 2015 versus 2.9% in 1990, 2.8% in 2000 and 3.2% in 2010). Historically, a great deal of migrant flow has occurred from poorer to wealthy countries. More recently, however, the pattern of flows has changed - between 1990 and 2015, outward migration from Europe to Latin America has risen 4.0 times and to Asia by 3.4 times. Similarly, migration from North America to Africa during the same period has jumped by 4.2 times, to Asia and Latin America by 2.5 times. It is interesting to note that, during the same period, within-region migration has been fairly stable (mild increases). On a relative basis, migration growth has been the lowest within North America at 1.2 times and highest within Oceania (nearly double).

Another rising form of people flow is tourism. In many emerging economies, "foreign travel" is one of the most prized yet under-penetrated forms of consumption (Wealth Report). In 2015, international tourist numbers hit a level of close to 1.2 billion people, twice the level reached in 1995, while tourism expenditures have trebled in the same time period. In dollar terms, Chinese tourists spend more than tourists from the USA, Germany, the UK and France put together. In terms of destinations, Europe is most popular, with 600 million tourists arriving there each year, followed by Asia-Pacific and then the Americas with close to 200 million inbound tourists each.



## Ten issues to watch for in 2017

If 2016 is the year that "broke" globalization, then 2017 will see the makings of a more multipolar world and the threat of a break-down in trade. Here we flag the issues and events we think bear watching.

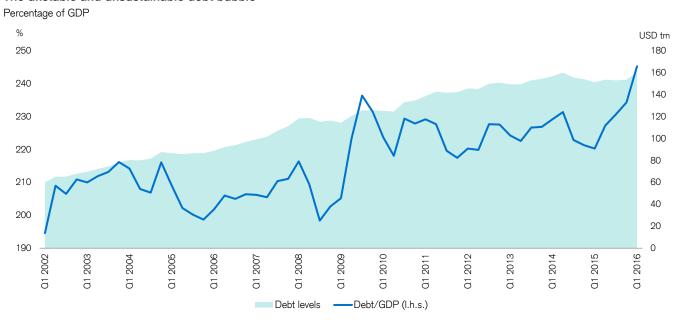
- 1. The health of trade with the TPP and TIPP now looking like they will not be ratified, and trade obstructionist measures growing, the pace and health of trade is perhaps the key variable to watch (see Figure 1).
- 2. Debt zero and negative rates have meant that the world could ignore high debt levels and in many cases take on more of it. But rates are now rising and this may put pressure on certain companies and countries. The Bank for International Settlements (BIS) rightly warns that world debt levels are now higher than they were in 2007 (see Figure 2).

Protectionist measures dominate and distort global trade Number of trade measures 1600 1400 1200 1000 800 600 400 200 0 Russia Turkey Brazil Japan Saudi Arabia USA India UAE  $\preceq$ Sermany ■ Protectionist Liberalizing

Source: Global Trade Alert, Credit Suisse

Figure 2

The unstable and unsustainable debt bubble



Source: BIS, Credit Suisse

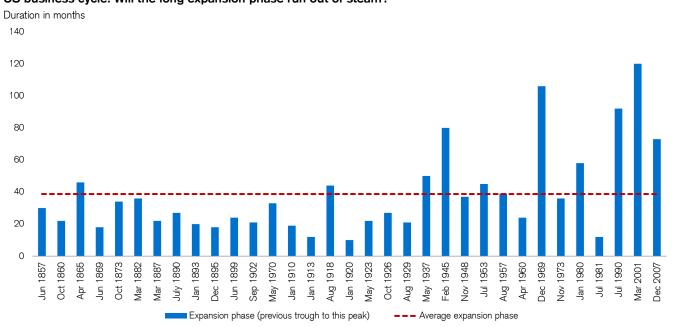
3. Immigration – immigration is perhaps the hottest political topic in Europe, and was a key reason why many in the UK voted for Brexit. The EU needs a plan to deal with immigration in the sense that all of its members buy into it and that it ceases to become a controversial political issue (see Figure 3).

4. When will be the next recession? In the last seven years, markets have arguably priced in about four recessions. With debt levels in China very stretched and corporate margins low, and the US recovery beginning to perk up (and having gone on for some seven years), the next natural recession cannot be too far away, in our view (see Figure 4).

Migrant flows in the European Union and the UK Percentage share 100 90 80 70 60 50 40 30 20 10 0 France Sweden Poland Norway Denmark Hungary Romania Finland United Kingdom Spain Italy Austria Belgium Ireland Greece Switzerland **Netherlands** Czech Republic ■ Nationals ■ Non-nationals ■ Unknown

Source: Eurostat, Credit Suisse

Figure 4
US business cycle: Will the long expansion phase run out of steam?



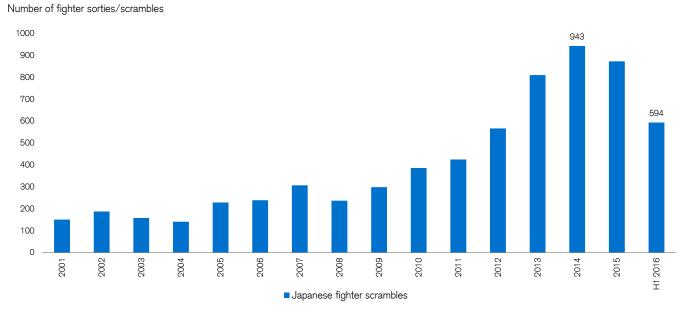
Source: NBER, Credit Suisse

5. "Strangelove scenario" – military confrontation by accident or design. The South China Sea is frequently mentioned by commentators as a theater for large power confrontation. But with Syria's conflict becoming ever more complex, there are other areas that could spark a military conflict. In 2014, Japan scrambled (i.e. intercepted) 943 jets, just

slightly shy of the Cold War record of 944 scrambles in 1984. The number of scrambles in the first half of 2016, at 594, comes significantly higher than the 343 scrambles recorded in the previous year during the same 6-month period (see Figure 5).

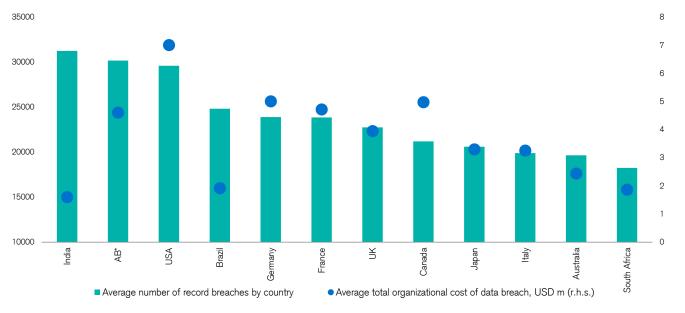
Figure 5

Japanese fighter jet scrambles



Note: numbers include scrambles made on presumptions Source: Ministry of Defense (Japan), Credit Suisse

Figure 6 Data breaches: Information (in)security and costs

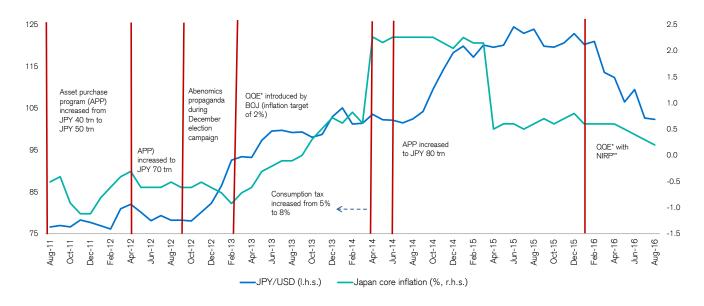


\*AB stands for Arabian cluster (a combined sample of Saudi Arabia and the UAE) Source: IBM/Ponemon Institute, Credit Suisse

6. Stealth attacks or cyber war - cyber-attacks on companies are more commonplace now, but for obvious reasons we hear less about attacks on states by other states. It may simply be a matter of time before one of these goes badly wrong, or elicits a robust response (see Figure 6).

7. Central banking accidents - a policy move causes a central bank to lose credibility. For example, if the Bank of Japan tries too hard to push inflation upward, and then the yen rallies (see Figure 7).

Figure 7 Bank of Japan's unconventional monetary policy and fight against deflation



Note: \*QQE stands for qualitative and quantitative monetary easing, \*\*NIRP stands for negative interest rate policy Source: Thomson Reuters DataStream, Credit Suisse

Figure 8
Emerging market consumer appetite declining

Net percentage of respondents replying "Yes" to "Is now a good time to make a major purchase?"



Source: Credit Suisse Emerging Consumer Survey 2016

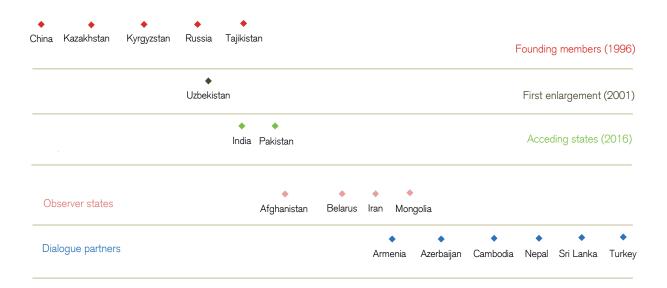
8. People tire of consumerism – consumerism has been a hallmark of globalization, notably now in many emerging markets. In recent years, the Credit Suisse Emerging Consumer Surveys have highlighted the decline in consumer appetites and the evolution of tastes. However, difficult labor market conditions in some countries (in 2015, consumers in Russia, South Africa and Turkey were pessimistic or least optimistic with their income outlook), growing wealth inequalities and a shrinking middle

class may be dulling the lure of aspirational lifestyles and the acquisition of material well-being (see Figure 8).

9. Multipolar jurisdictions harden – some states may feel that, in the comfort of being a geopolitical or economic power, they can afford to ignore international law. Thus different regions increasingly adopt their own "way of doing things" to the detriment of trade and potentially human rights (see Figure 9).

Figure 9

The formation and expansion of the Shanghai Cooperation Organization



Source: SCO, Web search, Credit Suisse

10. Climate events – climate change is an integral part of globalization, both in terms of the effect that globalization has had on the climate and also in terms of the remedies (regulatory and technological) that have evolved to try and reverse this. 2016 has been the hottest year on record since 1880 and a repeat of this will strain many farms, food supply chains and could provoke humanitarian crises (see Figure 10).

#### What to do about it?

In our view, the debate around "How to sustain globalization" is likely to be heavily conditioned by a desire on the part of many to cling to and revive a form of globalization that enriched them and a resistance to a more multipolar world where other people and other countries have relatively more economic and political power. Indeed, it may take a "crisis of globalization," which with Brexit and the rise of President-elect Trump may already be upon us, for policy to respond. In this respect, our conviction is that the transition from globalization to a multipolar world is now underway and, in this regard, it is better to focus policy on creating a multipolar system that works well through clear rules and relevant institutions.

Given the sizeable role that central banks play in the world economy it is also natural that many people will instinctively look to them to try to sustain globalization. We would not favor such an approach and feel that this kind of view is misguided. Still, there are perhaps three options for central banks, i.e. to continue using extraordinary policy measures in an everyday way and to further expand the central banking policy toolkit; to push for the joining of accommodative monetary policy with active fiscal policies; and, finally, to leave behind extraordinary policies (quantitative easing and negative rates) in the knowledge that these have cossetted political leaders and arguably delayed rather than sped up reforms.

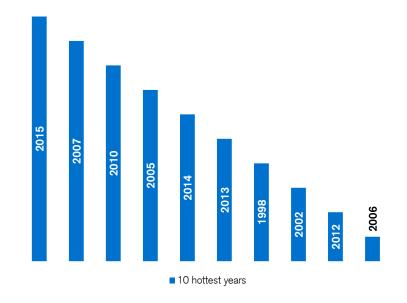
To focus more specifically on the tension between globalization and multipolarity, we see two options. The first is to try and sustain globalization via several necessary steps starting with pro-globalization political leaders developing a tangible narrative (in terms of examples and policies) on the benefits of globalization, followed by actions that might better distribute the benefits of globalization. This part could be controversial - more progressive tax structures in countries like the USA and the possibility of "taxes on technology" or levies on monopolies would be an attention-grabbing means of turning public opinion.

On a more substantial basis, a new imaginative GATT/WTO trade round would need to be launched, possibly encompassing the implications of Brexit, a desire of the USA to recast the North

Figure 10

#### The ten hottest years

Ranked by anomalies (degrees Celsius)



Source: National Oceanic and Atmospheric Administration (NOAA), Credit Suisse

American Free Trade Agreement (NAFTA), and the cementing of more stable trade relations between Japan and China. Institutional changes would also have to be forthcoming, notably in the area of corporate governance (investor surveillance of compensation and corporate indebtedness) and in the workings of international institutions like the IMF in terms of their relevance to the globalization process. This could take the form of overseeing more formal agreements on the fluctuation of major currencies and in policing national debt levels.

On the more realistic side, attempts to relaunch "globalization as we know it" may struggle in the face of entrenched skepticism over its benefits and the reality that demographics, indebtedness and to a large degree productivity weaknesses are likely to persist and hold down the trend rate of growth internationally.

Accepting the "road to multipolarity" is a more realistic perspective, in our view, and certainly a scenario that is preferable to an "end of globalization" outcome. However, multipolarity, especially in its adolescent phase, is prone to policy errors, rivalries and geopolitical tensions. It may be better to attempt to establish a set of rules and appropriate institutions now, so as to frame multipolar stability. This initiative could take several forms - for instance, an international cyber security agreement that follows the nuclear arms control agreements of the 1980s, or where migration becomes more intra-regional and more restrictive between large "poles."

In the absence of new global trade agreements, the major "poles" (USA, EU, Japan, India and China) could set up a trade coordination body to help minimize trade disputes and to bring countries together to cooperate on trade-based initiatives such as China's Silk Road project. We also see several areas where poles may compete – one is in financial market deepening, where the USA may pursue the more intense dollarization of economies in the Middle East and Latin America, with the Eurozone, Japan, the UK and China all fighting to establish themselves as financial market centers.

The existence of 3–4 large "poles" could be accompanied by the creation of formal and informal coalitions between medium-sized and smaller states. For example, we may see the creation of a formal network of small open-economy developed countries (see the Credit Suisse Research Institute publication, "The Success of Small Countries," August 2014) to exchange policy and to create a "voice" for smaller nations.

Institutionally, 20th Century international institutions may be scaled back. The World Bank and the WTO at least may find themselves defunct in this new landscape and may need to be recast as much smaller, regionally focused institutions (i.e. the World Bank might move its base to Africa). Similarly, the United Nations may find that some of its activities such as health and education remain valued, but that its Security Council and peace-keeping missions are less popular and fade into disuse. Compared to the USA and China, Europe will have the greatest challenge institutionally in terms of being able to present a unified policy/voice on economic, financial and diplomatic issues. A senior, heavyweight EU foreign minister will be required, backed by a credible EU defense strategy and army. In finance, Europe may push ahead with the establishment of an EU Treasury, and the completion of the Eurozone framework.

In conclusion, our view is that globalization has now come to an end and is slowly being replaced by a world where very distinct poles are forming – economically, socially, ethically and politically. This process has the potential to provoke friction, specifically as regions develop different ways of "doing things." Our hope is that the major regions, and constellations of smaller, developed states appreciate the positive aspects of globalization and carry its lessons into the 21st century.

### **Imprint**

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