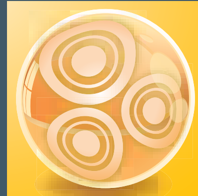
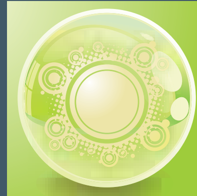
WORLD SCENARIO SERIES

WORLD ECONOMIC FORUM

COMMITTED TO IMPROVING THE STATE OF THE WORLD

The Future of the Global Financial System

A Near-Term Outlook and Long-Term Scenarios

Section 1

The shifting macroeconomic landscape

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The shifting macroeconomic landscape

The recent dislocations in the capital markets and the subsequent reshaping of the financial services landscape provide a stark reminder of the industry's fiercely evolutionary nature. This report examines the potential implications of recent changes to the wholesale financial system's regulatory framework and market structure, with the goal of identifying and understanding the strategies and business models that will survive and excel in the near- and long-term.

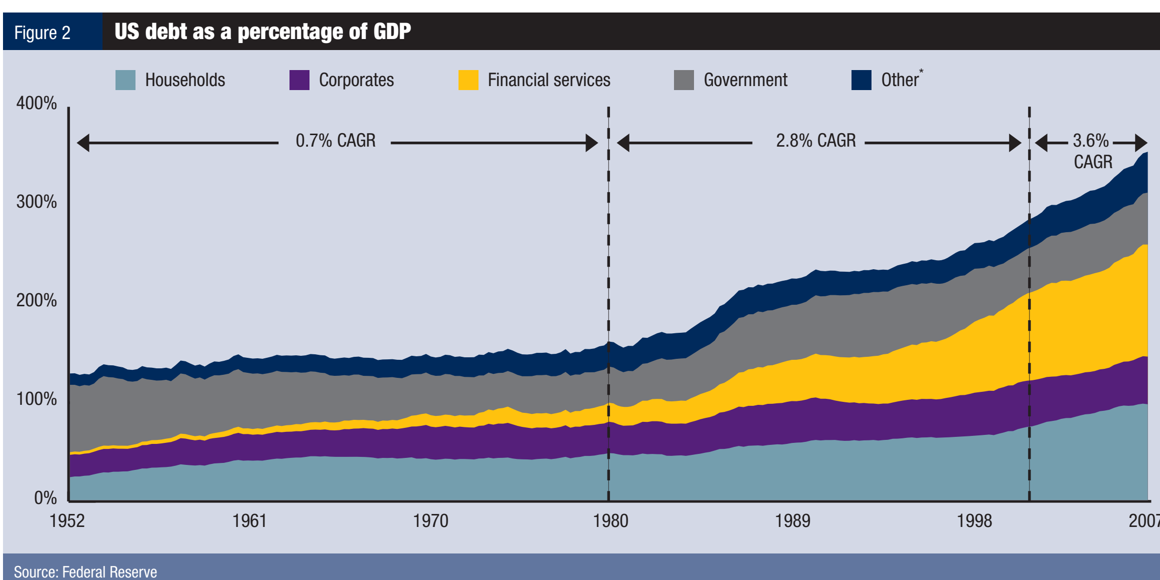
To understand the industry's near-term outlook and potential long-term evolution, a brief assessment of how the industry has been transformed over the past decade is necessary. In this section, we examine both the industry's recent past and the latest emerging trends as a means of contextualizing potential developments. In the following sections, we develop perspectives on the potential near-term implications of the current financial crisis, as well as a set of long-term scenarios for the global financial system.

The recent past: growth driven by credit, leverage and deregulation

During the 20 years leading up to the financial crisis that began in mid-2007, the global economy entered a period characterized by a remarkable degree of macroeconomic stability. Across the OECD countries, volatility in GDP growth, inflation and unemployment declined substantially. Recessionary periods became shorter and less damaging. Within this environment, the wholesale financial system – in which we include corporate and institutional banks, traditional and alternative asset managers, sovereign and institutional investors, insurance providers and financial exchanges – enjoyed unprecedented earnings growth, particularly throughout the most recent credit cycle, thanks to expansionary monetary policies, financial globalization and sustained economic expansion.

Although it is outside the scope of this report to enumerate the root causes of this prolonged boom, there are several trends within the period that are worth noting. The first is the dramatic expansion of debt relative to GDP. Within the US, total credit market borrowings grew from approximately 160% of GDP in 1980 to over 350% in 2008. This growth in borrowings was particularly acute among two segments: households and the financial services sector. Relative to the size of the US economy, household borrowings roughly doubled from 45% of GDP in 1984 to 97% in 2008. More strikingly, financial sector debt surged even more powerfully during this period, growing from 19% of GDP in 1984 to approximately 115% in 2008 (Figure 2).

Figure 2 **US debt as a percentage of GDP**



Source: Federal Reserve

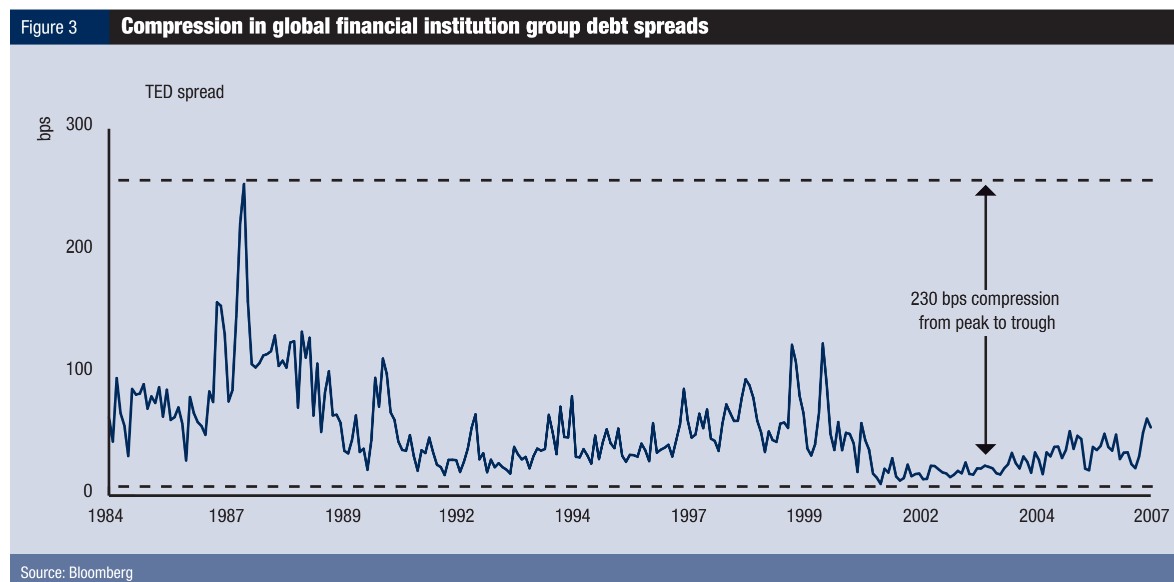
* 'Other' includes non-farm non-corporate businesses, farms, and foreign debt

This rise in borrowing coincided with sharp declines in nominal interest rates, beginning in the early 1980s. Although rates remained prone to fluctuation, the overall downward trend lasted approximately 25-30 years. The yield on 10-year US Treasury Notes fell from a peak of almost 16% in the early 1980s to just over 4% by the second quarter of 2008.

The most recent surge in financial services growth began with the cyclical rate cuts that started at the beginning of 2001. During this cycle, the effective federal funds rate fell to 1% by mid-2003, where it remained until mid-2004. Despite a series of ensuing rate increases by the US Federal Reserve, forward rates remained relatively low for a sustained period, reflecting investor expectations for a continued low-rate environment. As a result, indicators of financial risk, such as the spread between rates on 3-month Treasury bills and 3-month LIBOR, declined sharply (Figure 3).

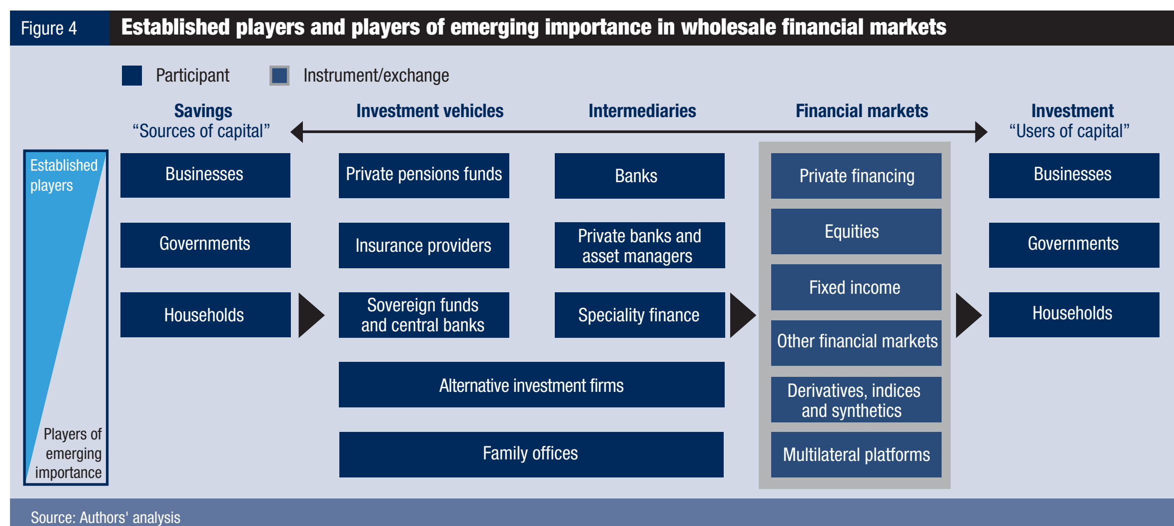
Within the wholesale financial system (shown in a simplified form in Figure 4), this increase in access to inexpensive credit magnified returns on actively managed investment portfolios. During this period, hedge funds and private equity firms benefited from a confluence of factors, including cheap leverage and increasing appetites for riskier asset classes among institutional investors. Assets under management in the two sectors grew from a combined US$ 1.8 trillion in 2003 to over US$ 4 trillion by the end of 2007.[3] Searching for yield in a low interest rate environment, institutional investors rewarded capital-intensive, highly leveraged businesses. As profit margins from more mature traditional brokerage and market-making activities declined, the business models of commercial and investment banks increasingly began to converge with the more highly leveraged principal finance activities of alternative asset managers, albeit with significantly higher degrees of leverage.

Figure 3 **Compression in global financial institution group debt spreads**



Source: Bloomberg

Figure 4 **Established players and players of emerging importance in wholesale financial markets**



Source: Authors' analysis

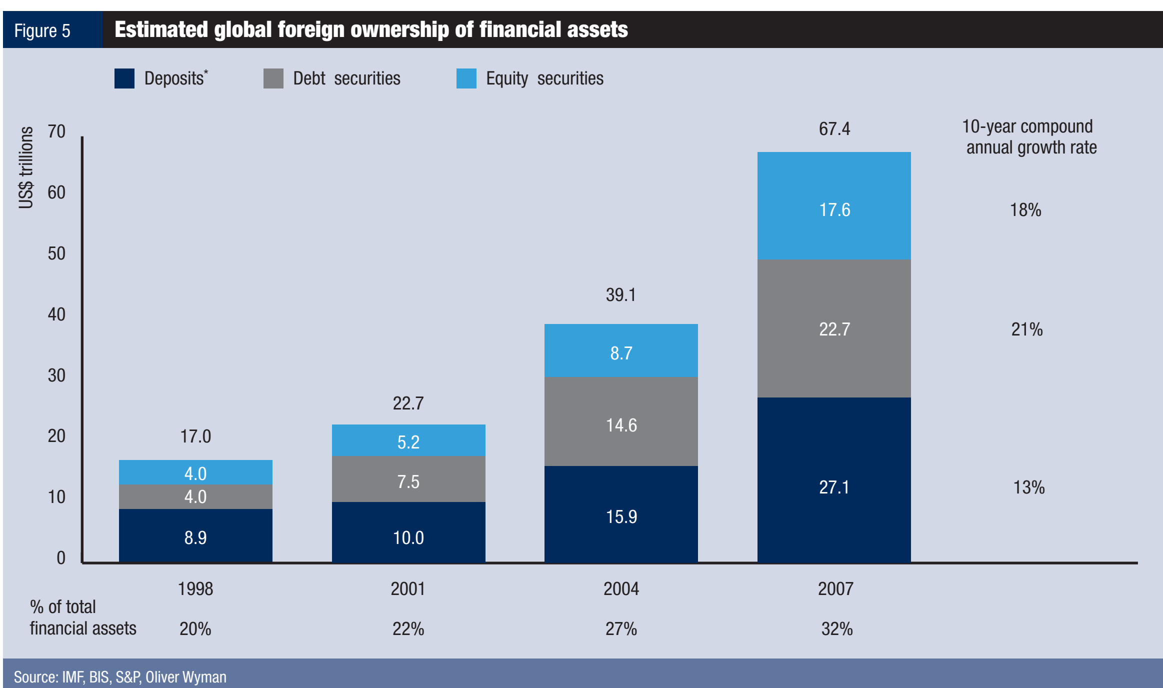
3 Oliver Wyman

The principal strategies of the global banks were supported by a resurgent belief in free markets, small government and self-regulation. The US financial services sector saw significant deregulation, most notably the repeal of the US Glass-Steagall Act, which until 1999 had prohibited bank holding companies from owning broker-dealers. Another significant event was the 2004 amendment of the net capital rule for investment banks with assets over US$ 5 billion. This change allowed the banks to use their own risk management systems to compute capital requirements, effectively shifting certain oversight responsibilities from the Securities and Exchange Commission (SEC) and European Union regulators directly onto the banks themselves.

At the same time, the globalization of financial markets and the growth in emerging market economies subtly shifted the prevailing macroeconomic order, precipitating a major restructuring of the global institutional investment landscape. Globally, foreign ownership of financial assets reached US$ 67 trillion at the beginning of 2008, roughly one-third of total global financial assets, up from just US$ 17 trillion, or one-fifth of global financial assets, a decade earlier (Figure 5). By 2008, the central banks and sovereign funds of Asian and Middle Eastern countries were estimated to have amassed some US$ 7 trillion in combined assets. These sovereign investors became net suppliers of global capital, with the central banks in particular purchasing large amounts of US dollar-denominated debt. With the added demand driving down fixed income yields, institutional investors began diversifying their excess holdings into riskier debt and equity products with higher returns.

Much of this purchasing activity was fuelled by countries with expansionary monetary policies that required them to accumulate sizable US dollar fixed income assets to limit currency fluctuations. This was particularly true for countries with trade surpluses in Asia and energy exporters in the Middle East. By adding significantly to demand for dollar assets, these policies flooded the market with liquidity, helping generate significant upward pressure on dollar-denominated assets, and keeping interest rates on dollar-denominated debt low. This surfeit of liquidity contributed to significant behavioural and market distortions. Consumer and investor euphoria pushed down savings ratios in the OECD countries (illustrated with the US and United Kingdom versus Asia in Figure 6), despite rising disposable incomes.

Figure 5 **Estimated global foreign ownership of financial assets**



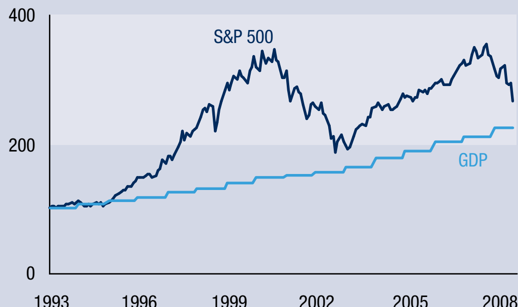
Source: IMF, BIS, S&P, Oliver Wyman

* Deposits are defined as external (i.e. cross-border) assets plus local assets in foreign currency. Figures may not sum properly due to rounding.

Figure 6 **Macroeconomic indicators for US, UK and Asia**

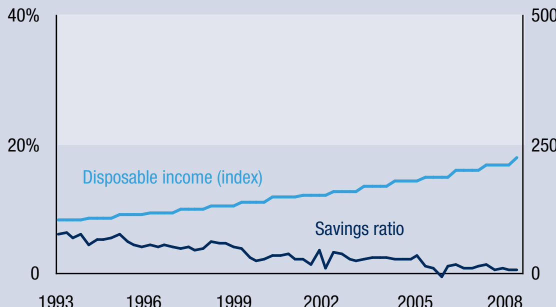
United States

Index (1993=100)



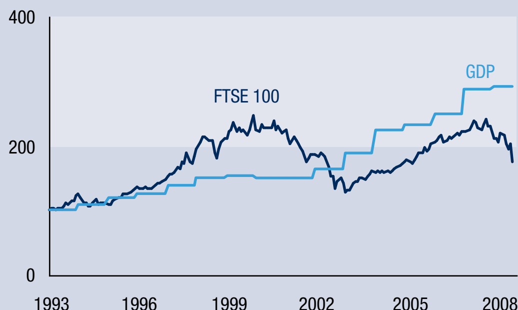
Savings ratio

Index (1993=100)



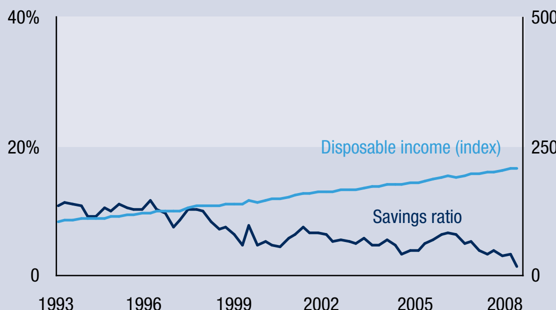
United Kingdom

Index (1993=100)



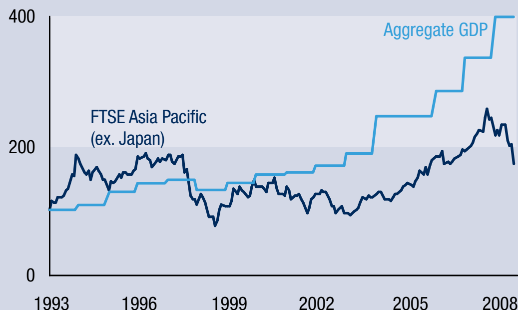
Savings ratio

Index (1993=100)



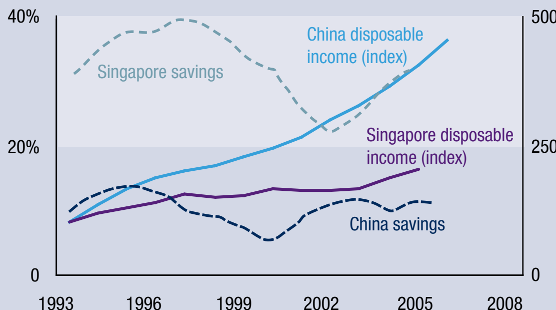
Asia

Index (1993=100)



Savings ratio

Index (1993=100)



Source: Bloomberg, Bureau of Economic Analysis, EIU, National Bureau of Statistics of China, UK Statistics Authority, United Nations Statistics Division, IMF, Oliver Wyman analysis

In summary, by the beginning of 2007, the financial services landscape had changed dramatically from its condition in 1984. After nearly two decades of healthy growth, the industry as a whole had shifted towards larger levels of leveraged position-taking, aided by flush liquidity conditions and a permissive regulatory environment.

The landscape as a whole had become much more tightly interlinked following the erosion of boundaries between financial business models. National boundaries also became significantly less important, resulting in increased correlation between global asset returns.

Preparing for the great unwind

In hindsight, this recent picture of macroeconomic and financial services growth was built on a foundation of imbalances, namely expansionary monetary and fiscal policy, excessive deregulation and ill-considered use of credit and leverage. The current financial crisis, which started with defaults in US sub-prime mortgages in 2007, marks the beginning of a disorderly reversal of these global imbalances. While hindsight reveals a host of other root causes of the crisis – including heavy use of off-balance sheet financing, overly lenient lending and risk management practices and misaligned compensation policies – the most serious, sustained challenge to existing business models in the financial sector can be found in the unwinding of these global imbalances, which has slowed global growth and given a renewed, more prominent role to governments and policy-makers.

The financial crisis marks the beginning of a new chapter for the global financial system, characterized by three important changes. They are:

1. deleveraging and a global economic slowdown
2. increased government intervention
3. a threat to the pace of globalization

In the near-term (2009-2012), the financial system will continue the deleveraging process, while financial institutions adapt their strategies to work within the constraints of increased government intervention and a weakening economic outlook. Over the longer term (2009-2020), the degree of financial leverage, the role of government and the threat to the pace of globalization are all much less certain, but will be equally critical for financial institutions to understand to develop effective business strategies. The remainder of this section will explore the near-term implications of these three key changes.

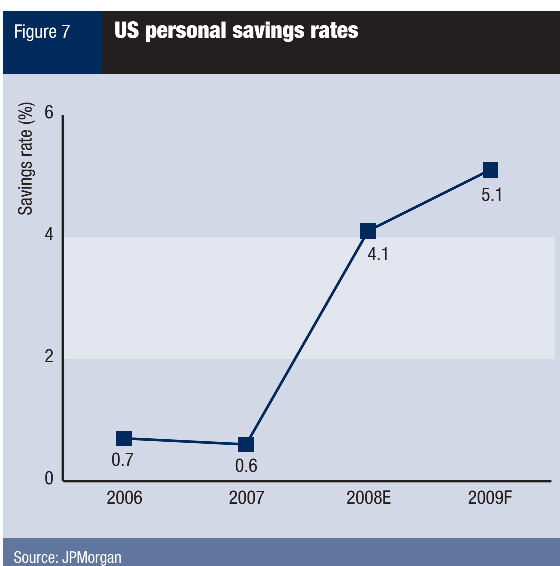
1. Deleveraging and a global economic slowdown

Over the near-term, the process of deleveraging bank and household balance sheets will have significant implications for the financial services sector, chief among them being the placement of sustained stress on the global economy. The corrective actions of banks and investors have so far had the most prominent effects, as manifested in ongoing price declines across global credit and equity markets. The rising cost of credit and the negative economic outlook have forced many investors to dramatically reduce their use of leverage, resulting in large global sell-offs across almost every asset class. These market declines have lowered household expectations for wealth creation, resulting in lower debt and higher savings ratios.

The unwinding of consumer debt, particularly among US households, will have the longest and most enduring effect. Despite the various fiscal stimulus packages currently making their way through the major economies, consumption across industrialized countries is all but certain to give way to increased private savings (Figure 7).

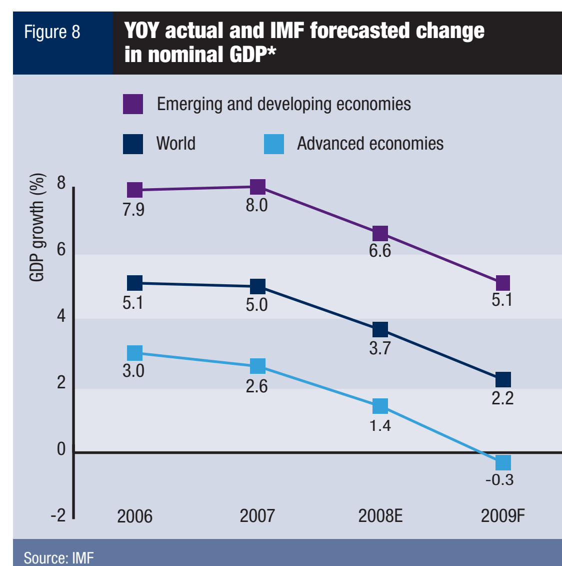
Although there is still some disagreement amongst economic forecasts, many believe that this aggregate decline in OECD consumption will lead to a long and protracted global slowdown. Already, the IMF is forecasting that world output will grow only 2.2% in 2009, down from 5% growth in 2007 and an estimated 3.7% in 2008 (Figure 8). This deceleration will be led by continuing

Figure 7 **US personal savings rates**



Source: JPMorgan

Figure 8 **YOY actual and IMF forecasted change in nominal GDP***



Source: IMF

* Dated as of November 2008

declines in house prices, rising default rates and sluggish spending associated with higher saving ratios.

The global downturn will have significant effects on the financial services landscape. In the near-term, slowdowns in the financial industry and in the real economy will mutually reinforce each other. With weakening levels of global consumption, economic growth will be limited, leaving financial institutions with fewer attractive lending and investment opportunities. Tighter credit standards and heightened risk aversion will make it difficult for businesses to finance their operations, resulting in further losses and bankruptcies. This will ultimately impact the value of existing bank assets, forcing further write-downs and credit contraction (Figure 9).

It is unlikely that the current unwinding of debt levels will resolve itself in the short term. The current levels of leverage within the system were accumulated over a span of 20+ years and are unlikely to simply disappear. As the "great unwind" spreads through the system, its effects will fundamentally shift the global macroeconomic order. First, governments will envision a renewed role in the oversight of financial markets. Second, different countries will be affected and will respond to the crisis in different ways, resulting in the potential acceleration or deceleration of existing power shifts from industrialized countries to emerging ones. Third and finally, reduced wealth and lower financial leverage will alter the visions and strategies of financial institutions. Those that fail to adapt will be marginalized by rising stars and new entrants unencumbered by historic practices.

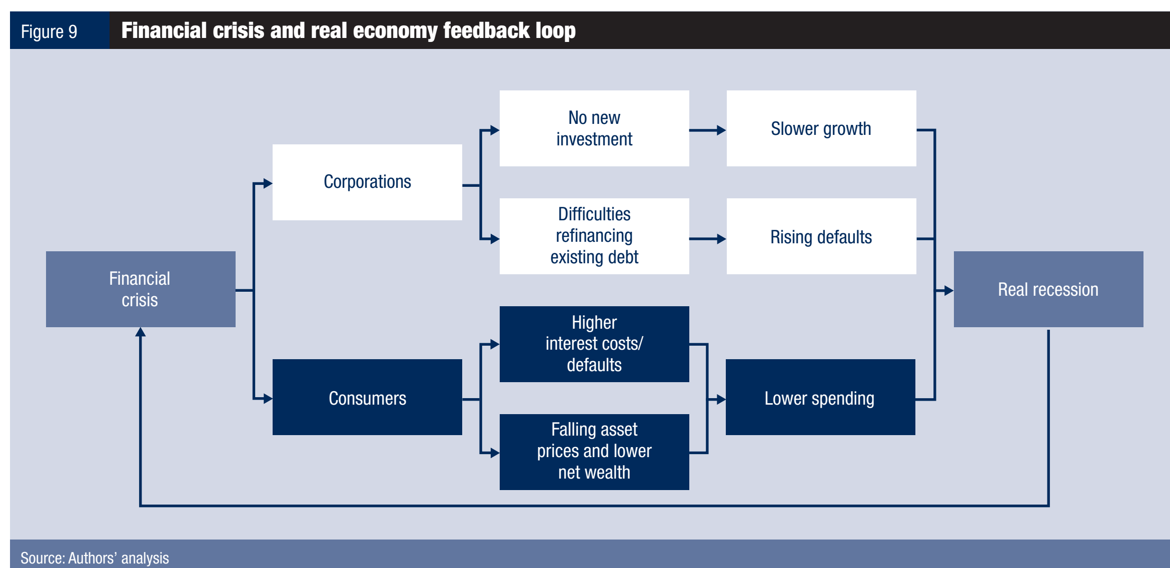
2. Increased government intervention

Once the extent of the financial crisis became more evident in mid-2008, most finance ministries, treasuries and central banks responded forcefully. These actions represented a new implicit contract between countries and their respective financial services sectors, in which governments will assume the risk from their national banking sectors in exchange for significantly increased levels of financial regulation and oversight. This latter side of the contract will take time for thoughtful design and implementation.

Intervention so far has been broad-based and relatively consistent across the major economies. These measures have included negotiated bank acquisitions, outright nationalizations when buyers could not be found, emergency lines of credit, liquidity injection programs to bolster short-term lending markets, state guarantees on interbank loans, and the introduction or expansion of deposit insurance schemes (Figure 10).

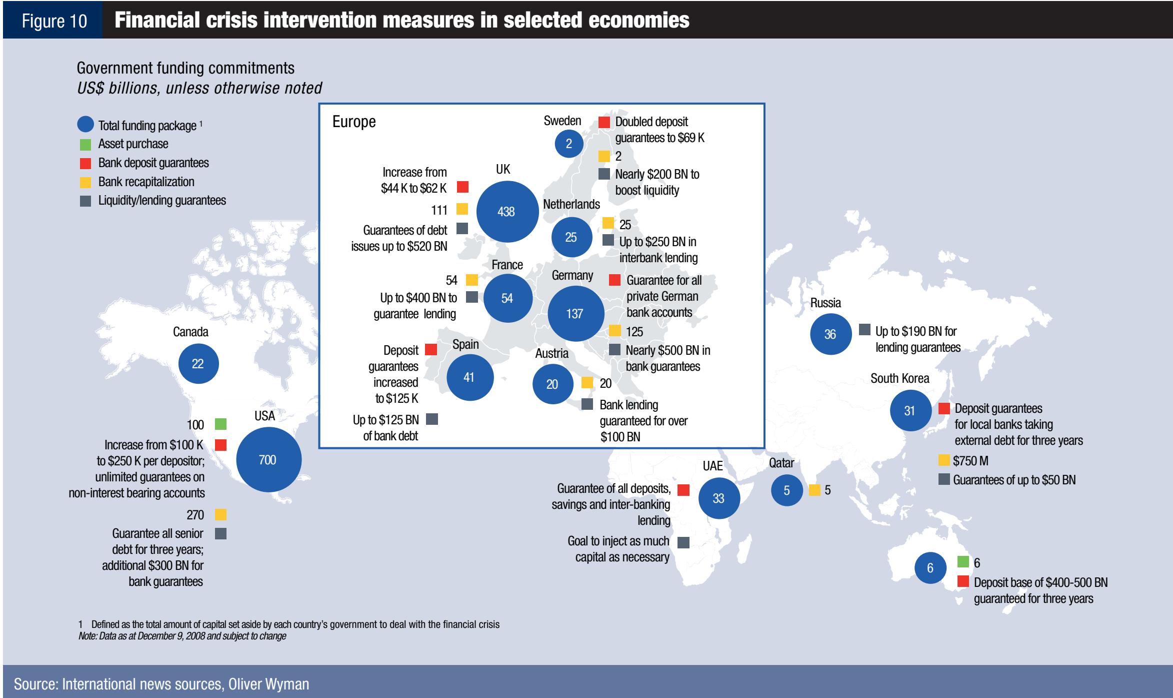
The scale of intervention has stretched the finances – and the creativity – of the major central banks, as illustrated by the change to the Federal Reserve's balance sheet (Figure 11). With these efforts to recapitalize national banking systems and inject liquidity back into the system, the central banks have added a plethora of new lending programs that have effectively transferred much of the world's leverage and financial risk on to national balance sheets.

Figure 9 **Financial crisis and real economy feedback loop**



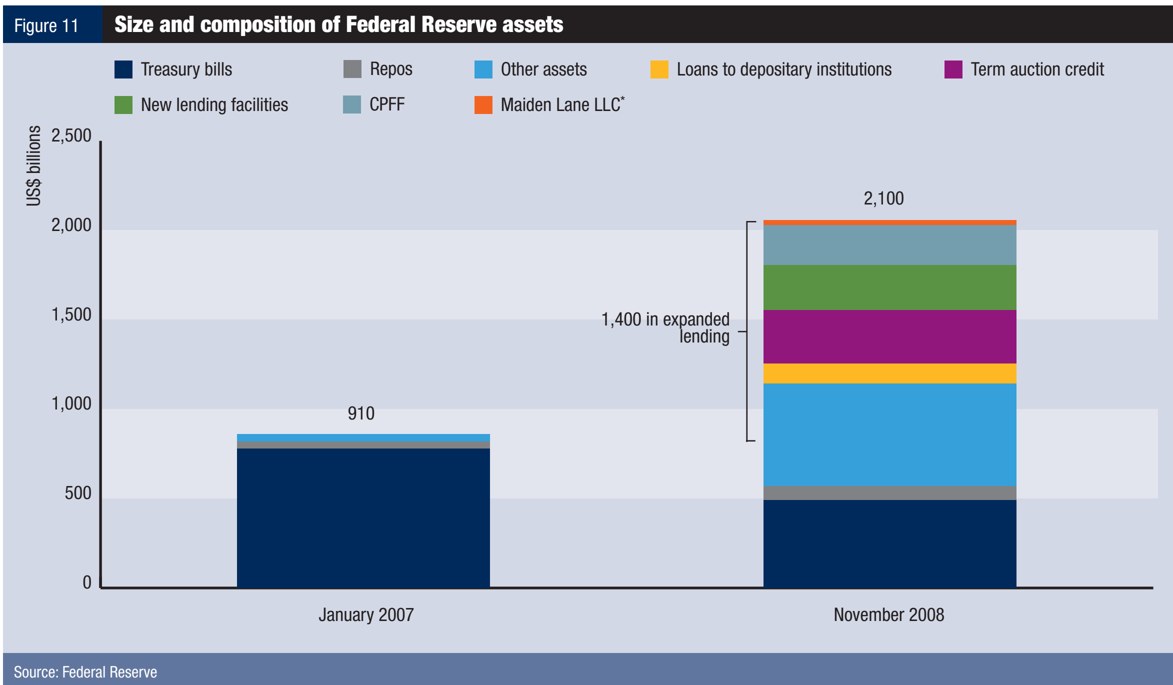
Source: Authors' analysis

Figure 10 Financial crisis intervention measures in selected economies



Source: International news sources, Oliver Wyman

Figure 11 Size and composition of Federal Reserve assets



Source: Federal Reserve

* Holding company created to receive US$ 30 billion credit line to facilitate the sale of Bear Stearns to JPMorgan

Intervention on such a massive scale has made it necessary for central banks to request special financing packages from their governments. As a result, national fiscal positions will be strained, raising the risk of sovereign defaults and the potential for IMF intervention. In the developing economies that have a greater reliance on external financial markets, the risks are even more significant, and include renewed pressures on inflation, currency devaluation, deterioration in foreign direct investment and a negative economic outlook.

This expansion of national risk-taking has dramatically shifted the role of government within the financial services sector. Where the activities of governments and their agencies were previously focused on oversight, they have now become active players in the very markets they regulate. Government intervention will be felt acutely by the newly semi-nationalized financial institutions, which will face competing objectives from sovereign and private shareholders. At a time when private shareholders are expected to take a more activist role to bring these

companies back to profitability, government shareholders could introduce new objectives that are misaligned with those of private investors. Take, for example, UK Financial Investments Limited (UKFI), HM Treasury's vehicle for bank holdings. Its overarching objective will be to protect and create value for the taxpayers as shareholders, with due regard to financial stability and acting in a way that promotes competition.[4] Exactly how UKFI will balance its objective of maximizing UK economic growth – which might imply temporary below-hurdle lending rates – with its objective of maximizing public shareholder returns remains an open question. In short, governments and private shareholders of partially-nationalized banks may not agree on what measures should be optimized in the near-term: domestic GDP growth or bank profitability. Finally, the effects of government intervention will also be felt by non-nationalized players as they compete with players backed by state guarantees.

The assumption of risk by governments is expected to lead to the greater regulation of all financial entities benefiting from their programs to ensure that taxpayer-funded investments are properly managed. This forms the second part of the implicit contract between governments and financial markets. Such regulation and supervision will have the dual objective of minimizing systemic financial risks and protecting businesses and households from market failures when they do occur. In contrast to the relatively consistent short-term response to market failures, the degree of change in regulation and supervision is expected to vary greatly by country, including the approach each takes to capital and liquidity management, compensation reform, regulatory oversight of the non-bank sector, and, to a lesser extent, the introduction of early warning systems and circuit breakers for systemic financial risks and increased coordination with foreign regulators.

3. Threat to the pace of globalization

The expectation of a sustained global economic slowdown threatens the pace of financial market globalization and, thus, future growth opportunities for wholesale financial institutions. Financial globalization has allowed these firms to expand their operations into new markets in both the advanced and the emerging economies. This has been a boon for the industry, resulting in increased revenues, investment access and portfolio diversification.

However, as damage from the financial crisis works its way through to newly open economies, the threat of increased capital controls becomes a distinct possibility. Debates regarding the role of "hot money" flows in international financial crises, having already received significant attention in the wake of the Asian and Russian default crises, may once again return to the forefront of public debate. As national governments investigate the conditions that led to the current crisis, arguments for limiting the exposure of domestic economies to external crises are also likely to regain their former prominence. Should national governments close themselves off and reinstate capital controls as a means of protecting their economies, these restrictions would significantly limit growth and investment opportunities for financial institutions. Such controls could potentially lead to higher debt costs – with supply/demand equilibriums differing greatly among regions – and might decrease the correlation of global asset returns.

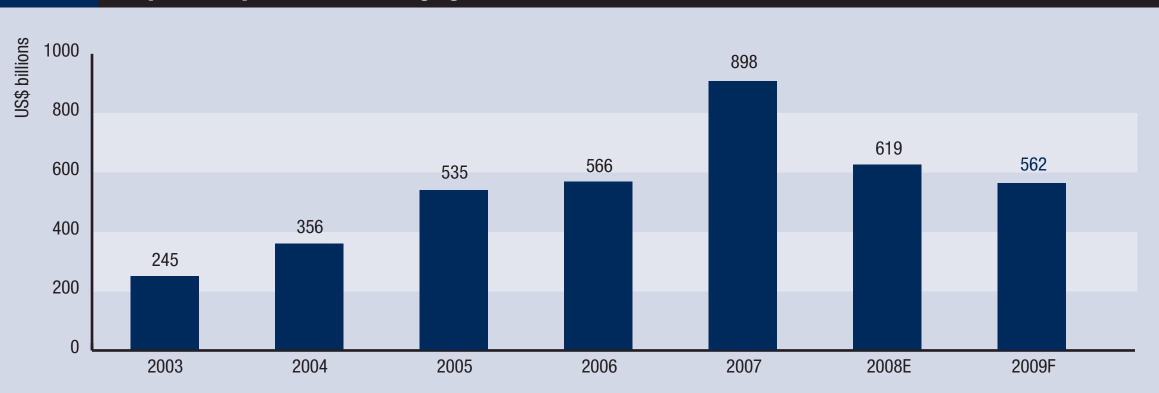
Signs of a slowdown in economic globalization are already evident in cross-border capital flows and trade volumes. The Institute of International Finance forecasts that net private capital flows to emerging economies will fall back to between 2005 and 2006 levels after reaching a peak of $US 898 billion in 2007 (Figure 12). Likewise, global trade flows, which rose 9.4% in 2006 and 7.2% in 2007, are forecasted to grow by just 2.1% in 2009, the slowest rate of growth since 2001 (Figure 13).

As the number of nationalized banks continues to rise, so too will the incentive for governments to adopt nationalistic banking policies. Having invested billions of dollars in shoring up national banks, some governments may be loath to permit foreign banks to compete in their domestic markets. These impulses may be somewhat tempered by the need for additional sources of lending across the global economy. However, should nationalistic sentiment predominate, it could lead to greater fragmentation of the banking sector, with banks increasingly focused on their domestic markets.

There is significant uncertainty as to the extent to which the current crisis could result in a full-blown reversal of the trend towards globalization. While some economies may attempt to inoculate themselves from future global

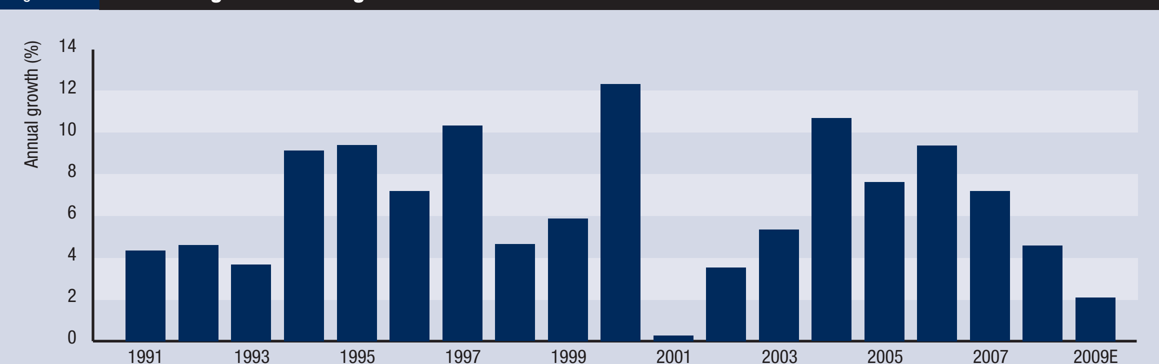
4 HM Treasury, http://www.hm-treasury.gov.uk, 2008.

Figure 12 **Net private capital flows to emerging economies**



Source: Institute of International Finance

Figure 13 **Volume of global trade in goods and services**



Source: IMF

contagions, others are likely to recognize that the potential damage from such policies outweighs the upside. Moreover, much of the impact of globalization, such as the emergence of global banks, the integration of bond markets and the connectivity of financial data and communication systems, would be extremely difficult to reverse. However, some degree of reversal remains a distinct possibility.

Key forces for the near- and long-term

Hence, over the near-term (2009-2012), the dominant trends in the global financial system will continue to be deleveraging, adaptation to increased government intervention and a weakening of cross-border economic activity. In section two, we develop a new industry outlook on the basis of these near-term trends and the implications identified in this section.

Over the long-term (2009-2020), the level of financial leverage, the role of government and the prospects for globalization are all much less certain, but will be equally critical for financial institutions seeking to develop effective business strategies. Consequently, in section three, we use a scenario-based approach to understand how key driving forces – social, technological, environmental, economic and political – might shape the wholesale financial landscape.

Section 3

Long-term scenarios for the future of the global financial system

Financial regionalism

CONTEXTUAL ENVIRONMENT

Overview: This is a world in which post-crisis blame-shifting and the threat of further economic contagion have created three major blocs on trade and financial policy, forcing global companies to construct tripartite strategies to operate globally. As the crisis deepens in the US and Europe through 2010, the emerging markets walk away from a series of global talks, reject Western models and ideals, and form their own bloc of domestically focused economies. The US is isolated. With the exception of tourism and energy materials, most trade flows among the blocs decline sharply. Energy security becomes a key issue.

Key indicators and events:

- Global growth is moderate but highly skewed, with emerging economies posting results of 9% while the US and EU remain at only 1.2%. Average global growth is 3.2% (see Figures A1 and A2).
- The US dollar and the euro are no longer the sole reserve currencies, thanks to the advent of a trade and currency regime within the newly created Eastern International Economic Community.
- Global economic power and geopolitical primacy have shifted firmly East, with China acting as the leader in Asia.

TRANSACTIONAL ENVIRONMENT

Overview: The financial world is split among the three regional blocs—the US-led Democratic Trade Alliance, the expanded EU area and the Eastern International Economic Community led by China. The global landscape is therefore characterised by old and new champions seeking to operate on a regional basis, with Asian financial institutions dominating the global landscape in terms of size.

Financial regulation and governance:

- Regulation is coordinated at a regional level and varies significantly between the three main trade and economic jurisdictions.
- The US continues to push a "market democracy" paradigm of minimal regulation. Eastern countries adopt a "controlled openness" system.
  The EU turns inward, regulating financial institutions heavily.

Re-engineered Western-centrism

CONTEXTUAL ENVIRONMENT

Overview: This is a highly coordinated and financially homogenous world that may yet have to face up to the realities of power shifting to the East and the dangers of regulating for the last crisis rather than the next. With emerging economies severely affected by the global recession, the West maintains economic and moral primacy by playing a leading role in corporate restructuring, driving productivity increases and maintaining free trade globally. Its crowning achievement is the reform of existing international financial institutions—dubbed "Bretton Woods II"—and the creation of a supranational regulatory authority. Unfortunately, Bretton Woods II falls short of the needs of emerging economies and the new regulatory regime fails to consider structural flaws in risk management, leading to renewed fears of an even bigger crisis.

Key indicators and events:

- Global growth is 3.6% overall for the decade, with growth in the advanced economies surging to 3.1% and the emerging nations averaging just over 6% (see Figures B1 and B2).
- With slower growth in emerging economies and rising exports of highly innovative products and services from the US and Europe, global imbalances unwind slightly.

TRANSACTIONAL ENVIRONMENT

Overview: After being dominated for a short time by politicians and regulators, the financial world is once again a major engine of profitability and growth managed by insiders. With emerging market exchanges marginalized and those in the developed world greatly restructured, the advanced economies drive a new phase of growth.

Financial regulation and governance:

- There is a new, supranational financial regulator, the International Financial Stability Fund, with the majority of the world's counties as members.
- Markets are criticized as being overly homogenized and highly vulnerable to contagion in the event of another major shock.

Fragmented protectionism

CONTEXTUAL ENVIRONMENT

Overview: This is a world characterized by division, conflict, currency controls and race-to-the bottom dynamics that only serve to deepen the long-term effects of the financial crisis. As the global recession bites, a range of other events, including inter-state conflict, domestic unrest and natural disasters, combine to make things worse. Countries try to look after their own economic interests, blaming each other and turning to populist, protectionist policies. Resource conflicts emerge, and security threats and terrorism keep nationalism and protectionism alive despite the high economic costs.

Key indicators and events:

- Global growth averages just 2.3% as debt unwinds in developed markets and almost all markets are negatively affected by economic stagnation and a series of natural disasters (see Figures C1 and C2).
- Capital controls and severe restrictions on the movement of goods and people exacerbate the economic malaise.
- The Eurozone disintegrates in 2014 under the pressure of public debt defaults and fundamental disagreements among members.

TRANSACTIONAL ENVIRONMENT

Overview: The financial world is extremely localized and highly volatile, with major arbitrage opportunities for those with the ability to execute trades across borders. Unfortunately, capital controls in most jurisdictions make this very difficult, and political risk is high.

Financial regulation and governance:

- Regulation is extremely fragmented by country and often extremely intrusive. The banking sector is nationalized in many jurisdictions.
- Restricted capital flows, the low-trust geopolitical environment and widespread trade protectionism mean very little financial policy cooperation among countries.

Rebalanced multilateralism

CONTEXTUAL ENVIRONMENT

Overview: In this world, initial barriers to coordination and disagreement over effective risk management approaches are overcome in the context of rapid shifts in geo-economic power. The global community learns from its mistakes through sharing: As the US goes through successive crises and the emerging economies battle their own problems, the world eventually realizes that meaningful collaboration is the only way forward. Major shifts in international institutions and a new recognition of the meaning of global governance imply that the financial system is better suited to the challenges of a complex, interdependent world in 2020, if not at all perfect.

Key indicators and events:

- Global growth is initially depressed to approximately 2.5%, but recovers to average 3.6% for the decade as emerging economies post particularly strong results. The US and EU continue to struggle with restructuring and deflationary pressures, with average growth around 1.8% (see Figures D1 and D2).
- Severe weather events in 2017 induce a second major financial crisis in the US, creating renewed incentives for international financial cooperation and risk management.

TRANSACTIONAL ENVIRONMENT

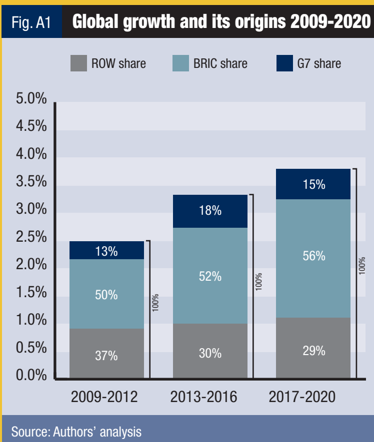
Overview: Emerging markets set the pace for economic growth, cooperation on financial policy and new approaches to systemic financial risk. The financial system is globally integrated but, given the rapid growth in the emerging markets, in many cases dominated by BRIC-focused players.

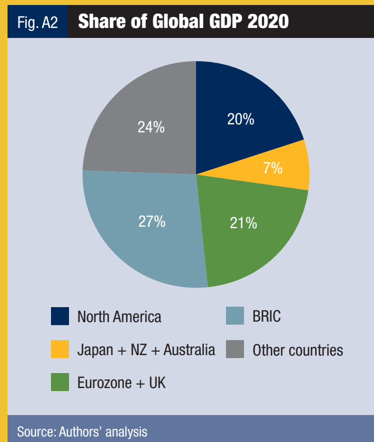
Financial regulation and governance:

- The new regulatory regime is characterized by a greater focus on systemic risk management through links to macroeconomic policy, confidence-building measures and contingency plans.
- The Bank for International Settlements becomes global lender of last resort.

Industry structure:

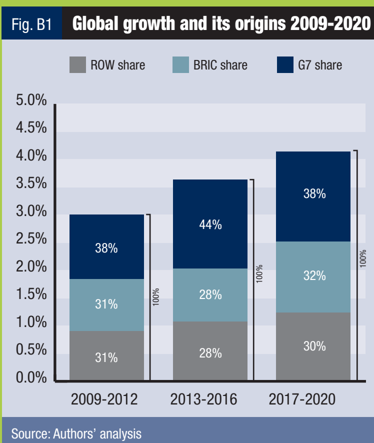
- Separate capital and regulatory requirements in each bloc increase costs for global players.
- Nationalized champions in the EU and Asia distort markets, particularly in insurance.
- Companies look to the East for both stability and yield.

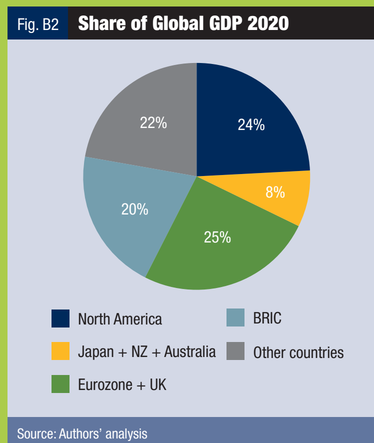




Industry structure:

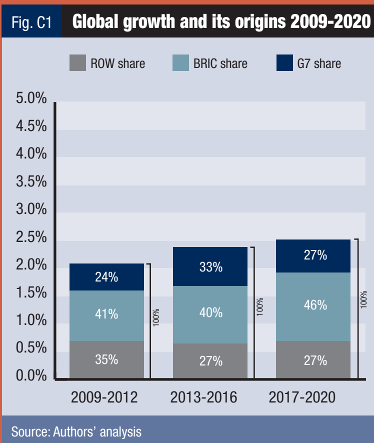
- Significant consolidation occurs thanks to a global level playing field and the after-effects of the 2008-2009 recession.
  Western companies still dominate financial markets.
- Investors are disapponted by returns in the emerging markets and seek gains in high-technology companies that lead advances in industries such as health care and energy.

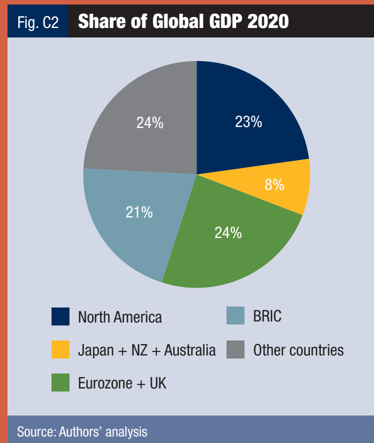




Industry structure:

- Life insurers face severe pressure, with constraints on investing assets and growing liabilities.
- Global service providers are forced to hold capital locally, greatly reducing capital efficiency and forcing many to reduce their geographic footprint.
- Severe restrictions on capital and liquidity make banking a far less profitable business.





Industry structure:

- The Chinese insurance industry matures and successfully enters the US market following the 2017 financial crisis there.
- Increasing levels of global competition drive consolidation and specialization in asset management, leading to strategies such as scale-driven distribution and specialized fund management.