



# Global financial centres after the crisis

August 2, 2010

**Financial market size: Traditional centres lose market shares, emerging markets up-and-coming.** US and EU financial markets continue to provide around three-quarters of global financial services, albeit, after the crisis, at substantially lower overall levels of market activity in many market segments. Emerging financial markets, especially in Asia, have grown strongly in past years and are set to accelerate their catch-up process.

**Financial centre competition: Established centres static, new centres rush up the league tables.** Traditional financial centres are repeatedly found in top ranks as regards their international competitiveness, typically including London, New York, Hong Kong, Singapore, Tokyo, Chicago, and Zurich. Their competitiveness ratings have not changed significantly over the past years. Emerging financial centres such as Beijing, Seoul, Shenzhen, Shanghai, and Dubai have improved their global ranking strongly since 2007, raising their competitiveness ratings by 42% for Seoul, 27% for Beijing, 22% for Mumbai, and 16% for Shanghai.

**Europe: Single financial market, but ailing financial centres.** European financial market places are falling behind in the rankings. Cities such as Paris, Madrid, Milan, Frankfurt, Amsterdam and even London, have clearly lost ground compared to other advanced and emerging locations, and seem to be missing opportunities to enhance their competitiveness.

## Four drivers of financial centre competitiveness after the crisis:

- 1. Big is beautiful – and will remain so.** London, New York, Hong Kong, and Singapore are set to remain strongholds of global finance after the crisis, building on existing market strength and favourable economic conditions.
- 2. Towards a multi-polar financial industry.** In the long-run, emerging financial centres are likely to succeed in establishing the scale and scope in their market environment that will help them advance into the top group of global locations. The crisis may accelerate this trend.
- 3. National focus as transitory advantage for smaller centres.** Local and regional financial market places may hope for continued relevance owing to the re-focusing of market participants and policymakers on their national markets. However, this tailwind will likely be of limited duration.
- 4. Good regulation as a competitive advantage.** Providing a good regulatory framework will be a key determinant of competitiveness going forward. Financial centres not compliant with international rules are faced with increasing political pressure and stigmatisation. Well-regulated financial centres may be considered as safe havens. But increasing regulatory density may also give rise to regulatory arbitrage. Financial centres need to analyse the impact of regulatory developments and decide which types of business and business practices they wish to host in their location.

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## Immediate impact of the financial crisis?

### Introduction

Financial centres are not easily shaken. They develop over long cycles. Even when financial markets turn nervous or economic conditions sour, the pivotal role of financial centres for their business environment mostly remains intact. Key financial centres around the world have grown substantially over the past decades, supporting and benefiting from the development of the surrounding economies at the same time. The share in value added in the home economies has increased significantly in most advanced and emerging markets.

After an event of the magnitude and intensity of the recent financial crisis, however, it is worthwhile examining its potential impact on the structures and business prospects of the major financial centres around the world, and assessing their likely course of development in future. Clearly, the performance of financial centres represents a vital part of the business conditions in which companies across all industries operate, and it therefore carries wider implications for other sectors, employment, and the economy. Although the final impact of the crisis on financial centres will only be observable at a later stage, this article reviews the current state of development of key advanced and emerging financial centres and identifies drivers of competitiveness for the coming years.

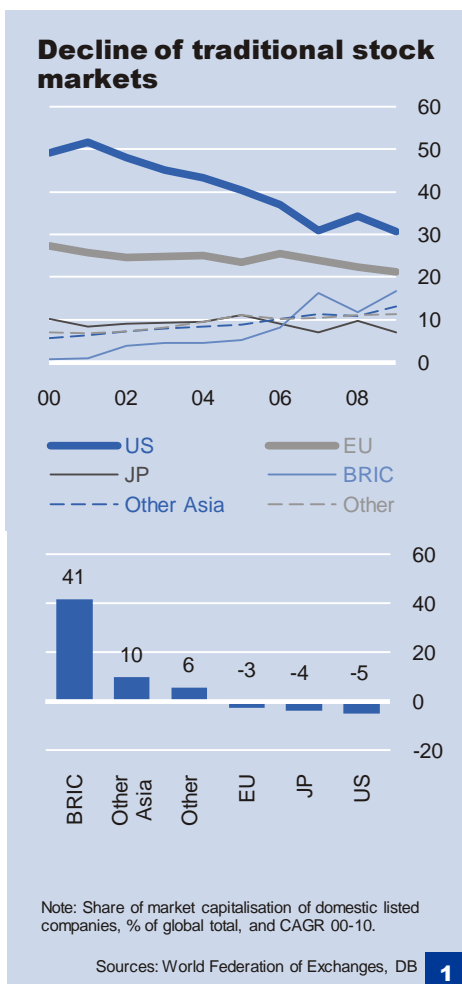
### Global landscape of financial centres after the crisis

The financial crisis, despite its impact especially on the US and Europe, has not immediately led to a critical change in the tectonics among the major financial centres around the globe. The traditional financial centres in the US and the EU have managed to retain their strong dominance and continue to provide around three-quarters of global financial services, albeit at substantially lower overall levels of market activity in many market segments.

**Banking:** Well over two-thirds of global banking assets remain concentrated in financial centres in the US and the EU.<sup>1</sup> Together, they capture more than three-quarters of the global revenue pool of investment banking services.<sup>2</sup>

**Stock markets:** At almost two-thirds of global stock market capitalisation, the share of the traditional stock exchanges in the US, the EU, Japan, Hong Kong, and Singapore remains dominant, albeit considerably lower than their 90% peak in 2000.<sup>3</sup> Their 79% share in global equity trading, however, documents their strong position as the key equity trading centres worldwide.<sup>4</sup> Moreover, US and EU equity-linked derivatives make up more than three-quarters of the global total outstanding.<sup>5</sup>

**Debt instruments:** More than 70% of all private and public debt securities and almost 80% of all interest-rate derivatives outstanding are registered in the traditional financial centres in the US and the EU.<sup>6</sup> Almost three-quarters of all new international debt securities are issued in New York or the major financial centres in Europe.<sup>7</sup>



1

<sup>1</sup> Transatlantic Business Dialogue (2010), p. 9.

<sup>2</sup> International Financial Services (2010), p. 5.

<sup>3</sup> World Federation of Exchanges and DB Research calculations.

<sup>4</sup> World Federation of Exchanges and DB Research calculations.

<sup>5</sup> Transatlantic Business Dialogue (2010), p. 9.

<sup>6</sup> Transatlantic Business Dialogue (2010), p. 9.

<sup>7</sup> Bank for International Settlements and DB Research calculations.

**Forex trading highly concentrated**

**Foreign exchange:** Foreign exchange trading remains highly concentrated in London and Chicago, with the UK and the US capturing a combined 50% share in global trading<sup>8</sup>. 70% of all foreign exchange derivatives transactions are undertaken in the US and the EU.<sup>9</sup>

**Challenge by emerging markets**

These impressive figures, however, cannot belie the fact that the historic position of the traditional financial centres in Europe and America is increasingly being challenged by emerging competitors.<sup>10</sup> Equity markets are an illustrative and in large parts representative example: The transatlantic share in global stock market capitalisation has declined substantially from its 78% peak in 2001 to just over 50% today, while its share in stock trading has fallen from 86% to just over 70% in the same period.<sup>11</sup> Strikingly, the growth of stock markets in the BRIC countries amounted to more than 40% per year, while the EU and US markets actually contracted. Likewise, the share of the BRIC countries in the number of listed companies worldwide has jumped from just over 2% in 2000 to 22% today.<sup>12</sup> More than half of the world's IPOs in 2009 were listed in China alone.<sup>13</sup> Similarly, Asia's share in the investment banking revenue pool rose from 13% in 2000 to more than 20% in 2009.<sup>14</sup>

**Pressure on traditional centres**

In light of these long-term trends, it is evident that traditional financial centres, including New York, London, Paris, Zurich but also Hong Kong and Singapore are facing heightening pressure to maintain their roles.

**Ranking of top financial centres worldwide**

1 to 20	21 to 40
London	Melbourne
New York	Montreal
Hong Kong	Cayman Islands
Singapore	Edinburgh
Tokyo	Seoul
Chicago	Dublin
Zurich	Hamilton
Geneva	Amsterdam
Sydney	Stockholm
Shanghai	Brussels
Toronto	Copenhagen
Frankfurt	Vienna
Boston	Wellington
Beijing	Madrid
San Francisco	Oslo
Washington	Milan
Luxembourg	Rome
Paris	Helsinki
Vancouver	Mumbai
Dubai	Prague

Note: Top-40 ranking of financial centres according to GFCI.

Sources: City of London, DB Research

2

**Financial centre competition**

The competitive position of the major financial centres around the world mirrors these trends. Traditional financial centres have grown to strength over decades and are repeatedly found in top ranks as regards their international competitiveness. A typical top-10 ranking of financial centre competitiveness includes London, New York, Hong Kong, Singapore, Tokyo, Chicago, Zurich, and Geneva among the front-runners.<sup>15</sup> Other financial centres in the advanced economies such as Sydney, Toronto, Frankfurt, Boston, San

<sup>8</sup> Transatlantic Business Dialogue (2010), p. 9.

<sup>9</sup> Transatlantic Business Dialogue (2010), p. 9.

<sup>10</sup> For a detailed analysis of the role of US and EU financial markets in the world economy see Kern (2008), also TABD (2010).

<sup>11</sup> World Federation of Exchanges and DB Research calculations.

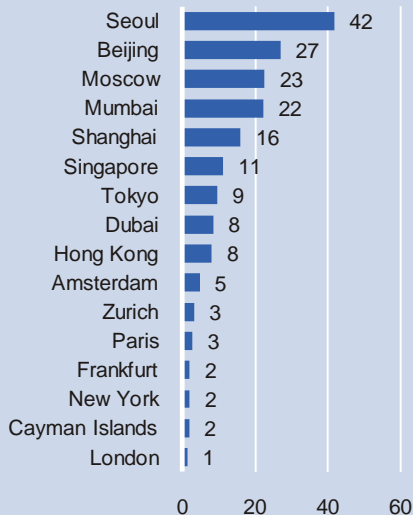
<sup>12</sup> World Federation of Exchanges and DB Research calculations.

<sup>13</sup> Kern (2009), p. 22. Figure includes Hong Kong SAR. International Financial Services (2010), p. 8.

<sup>14</sup> International Financial Services (2010), p. 5.

<sup>15</sup> City of London (2010), p. 28. The ranking reproduced here is the City of London's Global Financial Centres Index (GFCI), published bi-annually since 2007, and ranking 75 financial centres around the globe on the basis of indicators for availability of human resources, business environment, market access, infrastructure, general competitiveness, and assessments by market participants. Alternative approaches include the World Economic Forum's Global Competitiveness Report, in which measures for financial market development, financing through local equity markets, ease of access to loans, venture capital availability, restrictions on capital flows, strength of investor protection, soundness of banks, regulation of securities exchanges, and legal rights are summarised to obtain an index for financial market sophistication for 133 countries. Financial centres are not analysed individually. See World Economic Forum (2010), p. 337 ff.

### Emerging financial centres enhance competitiveness

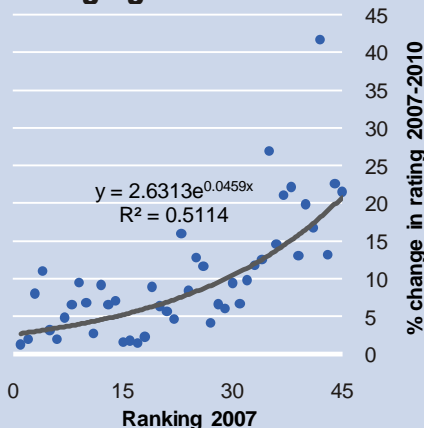


Note: Change in GFCI ranking for selected countries between 2007 and 2010, %.

Sources: City of London, DB Research

3

### Catch-up process of emerging financial centres



Note: GFCI financial centres ranking 2007 and subsequent % change in competitiveness rating 2007 against 2010. Exponential trend.

Sources: City of London, DB Research

4

Francisco, Washington, Luxembourg, Paris, or Vancouver consistently rank among the top-25.

Neither the ranking nor the competitiveness rating of these centres has changed significantly over the past years. Marginal changes aside, the composition of top league tables has been comparatively static, while improvements in their ratings – at between 1% and 3% for London, New York, Frankfurt, and Paris between 2007 and 2010 – have been marginal.

What may be described as continuity in the performance of these financial centres contrasts sharply with the rise of emerging financial markets. Emerging financial centres such as Beijing, Seoul, Shenzhen, Shanghai, and Dubai have improved their global ranking strongly since early 2007, jumping 20, 17, 14, 13, and 4 places up the global league table<sup>16</sup>, respectively. Even more impressively, the competitiveness rating of these financial centres has progressed dramatically, rising by 42% for Seoul, 27% for Beijing, 22% for Mumbai, and 16% for Shanghai.

These and other emerging financial centres have succeeded in exploiting the catch-up process to the traditional trading centres. Accordingly, the improvement in competitiveness ratings between 2007 and 2010 are closely correlated with the initial ranking of the centres.<sup>17</sup>

Financial centres have been categorised to capture their development. Most analyses differentiate the geographic reach of individual centres as well as the level of maturity that they have reached. At one extreme, mature financial centres with a global dimension are found to include Chicago, Frankfurt, Hong Kong, London, New York, Singapore, Toronto, and Zurich. At the other end of the scale cities such as Budapest, Istanbul, or Riyadh are considered to be local in scope and at an early stage of their development as broad and deep financial markets. In between, a broad variety of combinations of geographic reach – from local to transnational and global – and degree of development – from emerging to mature – have been identified. Much of the dynamism in competitiveness rankings and ratings discussed here can so far be observed in the lower and middle ranges of the league tables.

However, it is worthwhile noting three important caveats. First, as much as they still dominate, the top ranks in competitiveness league tables are no longer the prerogative of traditional financial centres. Most importantly, Shanghai, Beijing, and Dubai have successfully advanced to the top group of competitive financial centres although in terms of market size and maturity they still belong to the emerging centres.

Secondly, European financial market places are on the whole falling behind in the rankings. Thus, cities such as London, Paris, Madrid, Milan, Frankfurt, and Amsterdam have clearly lost ground compared

<sup>16</sup> City of London (2010), p. 28. Changes in ranking adjusted for new entries and drop-outs.

<sup>17</sup> The close correlation exists for the percentage change in GFCI rating points between 2007 and 2010 and the ranking of financial centres in 2007 ( $r=0.71$ ).

## Competitiveness rating

Top-20 performers	Bottom-20 performers	
Seoul	42	Geneva 6.8
Beijing	27	Helsinki 6.7
Moscow	23	Stockholm 6.6
Mumbai	22	Chicago 6.6
Athens	22	San Francisco 6.5
Rome	21	Montreal 6.4
Prague	20	Milan 6.0
Lisbon	17	Dublin 5.7
Shanghai	16	Sydney 4.9
Wellington	15	Amsterdam 4.7
Budapest	13	Madrid 4.1
Warsaw	13	Zurich 3.2
Luxembourg	13	Paris 2.7
Vienna	13	Melbourne 2.3
Copenhagen	12	Frankfurt 2.0
Vancouver	12	New York 2.0
Singapore	11	Cayman Islands 1.8
Oslo	10	Edinburgh 1.7
Tokyo	9	Hamilton 1.5
Brussels	9	London 1.3

Note: Top-20 and bottom-20 performers in GFCI competitiveness rating progress, % change in ratings between 2007 and 2010

Sources: City of London, DB Research

5

to other advanced and emerging locations, and, in particular, seem to be missing opportunities to enhance their competitiveness.

Finally, empirical assessments of financial sector competitiveness have yielded varying and at times contradicting results.<sup>18</sup> Depending on the criteria applied when measuring competitiveness, market maturity, sophistication or other indicators, financial centres can exhibit very different stages of development.

## Drivers of competitiveness after the crisis

The financial crisis marks an important caesura in the development of financial markets. Key segments of the markets declined or dried up temporarily. Significant market participants were weakened or disappeared altogether from the market place. Policymakers are working on reforming the regulatory and supervisory framework of financial markets. All of these factors influence the competitiveness of financial centres.

To be sure, the final impact of the crisis remains uncertain. The development in recent months suggests that financial markets may recover relatively swiftly from the severe turmoil of the years 2007 to 2009. Equity markets are recuperating from their lows, and the capital basis and profitability of key international banks has improved. Overall, market volumes in important segments by mid-2010 reached levels comparable to those before the crisis or even higher.<sup>19</sup> At the same time, it is unclear whether this recovery marks the overcoming of the crisis, or whether further set-backs have to be expected in coming years.

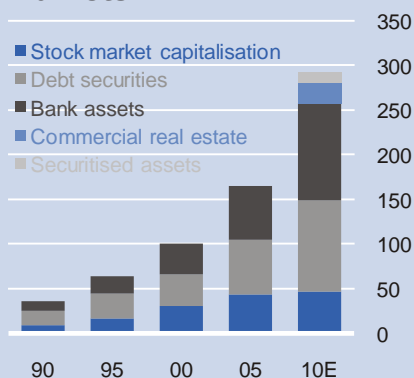
In light of these uncertainties, the question arises as to what will be the factors driving financial centre competitiveness and to what extent long-standing trends may be influenced by the repercussions of the crisis. Four major drivers can be identified.

### *Big is beautiful – and will remain so*

The world's traditional global financial centres – London, New York, Hong Kong, and Singapore – are set to remain strongholds of global finance after the crisis.

Financial market activity flourishes where economic activity thrives. Historically, financial centres have prospered in or near strong economies, e.g. the US, the Europe, or Asia, and their major commercial trading venues. Theoretical approaches to the location, distribution and size of financial centres have repeatedly underlined the central importance of their relevance for and proximity to real economic activity as the most important determinant of their development.<sup>20</sup> The financial crisis has neither altered the primary relationship between the financial centres and their surrounding

## Growth of global financial markets



Note: Stock market capitalisation worldwide, total assets of the world's 1,000 largest banks, volumes of debt securities outstanding, invested and investible commercial real estate assets, (from 07 onwards) securitised assets outstanding (from 07 onwards), all

Sources: DB Research, various public sectors

6

<sup>18</sup> The indicator for financial market sophistication in the World Economic Forum's Global Competitiveness Report, for example, produces a very different ranking of financial markets and their centres, among other things ranking the US, the UK and a number of European financial markets below countries such as India and Montenegro in terms of sophistication. World Economic Forum (2009).

<sup>19</sup> Recovery has not been achieved in segments that were hit particularly hard, including Asset Backed Securities, Mortgage Backed Securities, or Commercial Paper.

<sup>20</sup> For an overview of the theoretical approaches see Jarvis (2009) and Arner (2008).

### Classifying financial centres

Despite the significant variations in classifying financial centres, there is broad agreement on the factors that explain the emergence and development of financial markets, and that can help promote the competitiveness of individual financial centres. At a most general level, financial markets develop along real economic needs, with the financing of trade and commerce, the mobilisation of capital in light of economic competition, or the protection of assets in unstable economic environments as basic fundamental motivations. On the basis of these needs, financial centre development benefits if a number of conditions are met which facilitate the emergence of a network-type market place. These basic conditions include:

- innovative and competitive financial intermediaries
- solid market infrastructure for communication and financial transactions
- widely available information
- free capital flows and open access to domestic and international markets
- access to related professional services
- qualified human resources
- sound monetary and exchange rate framework
- stable political institutions
- rule of law and calculable business environment
- efficient regulatory and supervisory arrangements
- friendly tax environment
- quality of life

In combination, economic and business needs as well as the conditions for financial development greatly influence the success of financial centres, with a wide range of possible outcomes for individual market places. In practice, the key question is how these factors combine and to what extent they, together with other decisive external forces, produce patterns in financial market development which influence the overall landscape of financial centres around the globe.

### Crisis accelerates progress of emerging markets

economies, nor has it fundamentally changed the economic capabilities of the major economies in the world. The basic logic of financial centres servicing economic markets therefore remains untouched by the crisis.

In particular, London, New York, Hong Kong, and Singapore continue to benefit from their traditional weight in global finance. A large share of global financial services is generated in these hubs. In particular, the vast majority of investment banking services originates here. Thus, almost three-quarters of all equity trading is undertaken through their stock exchanges, even though companies listed in these locations make up less than one-quarter of the global total.

These centres enjoy historically grown and economically founded advantages of concentration and agglomeration. These include greater market liquidity, positive network effects, strong and stable market infrastructure and better and more professional crisis management by regulators and supervisors. More liquid and mature markets and functioning regulatory systems are key advantages for market participants, especially in light of the difficulties encountered during the crisis. Not surprisingly, the weight of the big four hubs in equity trading not only increased gradually from 40% to 60% between 1990 and 2007. It actually jumped up to more than 70% during the peak of the financial crisis, reflecting the flight for liquidity and quality in times of distress.

For emerging financial centres, categories such as market liquidity, market infrastructure, and sound regulation and supervision are particularly cumbersome to catch up with. Either they depend on the long-term development of markets and cannot be bought to start with or are very costly to build up. This makes the large financial players more difficult to challenge.

For the time being, therefore, the position of the traditional large financial centres remains strong. Depending on the future development, they may in fact enhance their position further, building on their strengths in terms of market liquidity and solid policy frameworks.

### *Towards a multi-polar financial industry*

In the long-run, emerging financial centres, especially in Asia, are likely to succeed in establishing the scale and scope in their market environment that will help them advance into the top group of global locations. In doing so they will continue along a trend of substantive market growth and enhancing competitiveness that locations in Asia and the Gulf region had embarked upon in the 1990s.

Importantly, the crisis may in fact accelerate these trends. As the share of emerging markets in the global economy rises, their potential as financial markets grows along. This progress is well under way and well documented. The combined US and EU share in world GDP fell from two-thirds in the 1990s to just about 50% in 2009. Conversely, the share of important emerging markets such as China, India, Brazil, Russia, and the Gulf region, has grown fast over the past decade. The underlying lead in growth rates is set to



widen in future, with developing Asia projected to continue growing above 8% per year in the medium term, the Middle East at close to 5%, and Latin America at 4% whereas the advanced economies may hardly surpass the 2% threshold.<sup>21</sup>

### **Strong financing needs ...**

This dynamism points at strong financing needs in the years to come, as e.g. new gross fixed capital formation in the emerging Asian economies is expected to grow around or above 5% in the coming years.<sup>22</sup> At the same time, financial flows from the advanced to the emerging economies are expected to stay behind the levels seen in the past<sup>23</sup>, suggesting that much of the financing needs in the coming years will need to be satisfied by domestic emerging financial markets.

### **... and substantial private and public wealth**

The dynamism is also a significant source of new wealth accumulation in many emerging economies. In 2009, the population of high net worth individuals in the Asia-Pacific region held almost USD 10 tr worth of assets, for the first time in history surpassing Europe in volumes and numbers.<sup>24</sup> The number of people belonging to and the assets of the middle classes in emerging economies in Asia and the Americas, too, has been rising considerably.<sup>25</sup> In addition to these private assets, many emerging economies have built up sizeable funds to manage sovereign wealth with assets under management in mid-2010 amounting to USD 3.7 tr. These private and public assets represent a rich source for new business in local financial centres. Not to mention the immediate benefits of a dynamic financial sector which typically contributes between 4% and 8% to gross value added in an economy and offers a large number of qualified jobs at financial firms and service providers.

### **Foundations for new financial hubs**

In light of these advantages, emerging economies have increasingly laid the foundations for their own financial hubs, pursuing national, regional, or even global ambitions. The most important examples include Beijing and Shanghai as mainland China's premier financial centres which are benefiting from the country's policy of opening up its financial markets, based on far-reaching regulatory reform since the late 1990s, the establishment of an advanced regulatory and supervisory system, and increasingly mature market segments. Growing domestic demand for financial services and the government's reform policies are expected to maintain the dynamism of the Chinese financial industry, bringing its shares in the global financial market from 9% to 13% in banking, from 2% to 5% in bonds, and from 6% to 16% in equities.

### **Chinese financial market set to flourish**

### **Dubai with ambitious agenda**

Similarly, Dubai has an ambitious agenda for becoming a regional financial hub, current economic problems notwithstanding. To that end, the authorities have provided a lightly-regulated market environment, undertook heavy investments in financial market infrastructure, and created a network of shareholdings in major stock exchanges worldwide. Similar projects, albeit at a smaller

<sup>21</sup> International Monetary Fund, "World Economic Outlook", Washington, April 2010, p. 155.

<sup>22</sup> International Monetary Fund, "World Economic Outlook", Washington, April 2010, p. 157.

<sup>23</sup> International Monetary Fund (2010), p. 179.

<sup>24</sup> Cap Gemini (2010), p. 4.

<sup>25</sup> For example Saxena (2010).

scale, have been drawn up for other market places in emerging economies around the globe.

### **Solid performance during crisis**

In terms of the crisis impact, the fallout may exert an accelerating effect on the rise of emerging market financial centres. Most emerging economies and their financial markets performed solidly during the crisis and have emerged strengthened since. Regulators and supervisors proved capable of handling the difficult situations that spilled over from the US and Europe. And policymakers in key emerging markets were quick to pick up the invitation by the G7 to join the G20 group, and have participated mostly constructively in formulating a globally coordinated economic and regulatory response to the crisis.

### **Enhanced reputation as stable and reliable financial markets**

Overall, countries like China, India, Brazil, Russia, and others succeeded in enhancing their reputation as stable and reliable markets, while the long-standing credibility of established financial centres as strongholds of financial stability with superior regulatory and supervisory institutions and processes suffered perceptibly. In parallel, financial markets in the emerging economies recovered more quickly than those in the advanced economies, returning fast to the status quo ante in terms of market prices, volumes, and liquidity.

### **But still long way to go to reach critical volumes and market maturity**

The progress made in individual countries, however, cannot belie the fact that many emerging financial centres still have a long way to go to reach the critical volumes, liquidity, levels of maturity, breadth of product choice, capacity and stability of market infrastructure, and market oversight by regulators and supervisors that have been achieved in London, New York, Hong Kong, Singapore, Frankfurt or Paris over many years. Nevertheless, it is safe to expect that centres like Shanghai, Mumbai, Dubai and others will assume strong regional and possibly also global positions within the next decade.

### **Local markets have hopes for continued relevance**

#### ***National focus as transitory advantage for smaller centres***

One of the key trends in the wake of the crisis has been the re-focusing of market participants and policymakers on their national markets. As a result, local and regional financial market places may hope for continued relevance, even if such a national focus may only be a transitory phenomenon.

### **Market participants retreat to familiar territory**

The financial crisis has highlighted the interconnectedness of financial markets across national and regional borders. In their drive to reduce risk exposure, many market participants have cut back foreign operations and cross-border transactions, and retreated to more familiar territories for lending and funding. Clients, in turn, have been disquieted by the risks involved in cross-border business, e.g. regarding insufficiently insured deposits with foreign banks in some jurisdictions or unprotected securities by foreign banks in others. This re-nationalisation was observed in many parts of the industry, including lower cross-border lending volumes, lower claims by EU banks on third-country banks, a much-reduced cross-border mergers and acquisitions business, as well as a substantial increase in domestic money market business relative to foreign transactions. Similarly, policymakers have primarily been concerned with



stabilising their home markets, with bank rescue packages and fiscal stimulus programmes naturally targeted at their domestic economies.

**Regulatory response focusing on national market**

Recent regulatory responses suggest, this national focus will continue. For one thing, regulatory provisions on bank support and resolution regimes in the US and the EU are likely to put cross-border operations at a relative disadvantage. In addition, national supervisors may require foreign banks to maintain additional capital cushions. And rules to limit the size and complexity of large banks may discourage foreign business or investments.

**Welcome breathing spell for local markets in short run**

The bottom line of these trends is that – at least for an interim period – there is a tendency for many parties involved to keep their eyes on their home turf, and be hesitant about what has come to be perceived as overseas adventures. This provides a welcome breathing spell to local, national and regional financial centres across the world which had been challenged by the rising competitive pressure from international centres and their market participants. One central question therefore is how long this home bias can be expected to last.

**In future, strong rationale for continued internationalisation**

In the long run, there is a strong rationale for markets and regulators alike to return to a strategy for stable global markets. For market participants, the benefits of cross-border diversification of risks and of exploiting profitable investment opportunities abroad are substantial and have been driving the development of the industry for more than a century. A national focus, in contrast, limits product choice and the scope of risk diversification as well as business opportunities in a world that in most other sectors is farther advanced in terms of globalisation than the financial business. For the markets, therefore, there is a strong rationale to resume their cross-border activities.

**Global regulatory coordination desperately needed, but increasingly unlikely**

The national emergency measures undertaken during the crisis, of course, were vital for the financial sectors and the wider economies affected. Their long-term effects in terms of discouraging foreign business, however, may be detrimental. In addition, the regulatory response to the crisis in the US and the EU and elsewhere is falling far behind the expectations raised in the course of the G20 deliberations. Despite strong commitments to a globally coordinated regulatory response, the consensus on cross-border cooperation on key regulatory issues, including central dossiers such as capital requirements, bank resolution or derivatives clearing, has been falling apart in the course of 2010.

**Consensus in falling apart**

**Alignment may eventually be achievable**

Despite these setbacks, globally consistent regulatory solutions may be achieved in the end. For one thing, the freedom of international capital flows by itself is not considered to be among the causes of the crisis, but at most as transmitter of its effects. More importantly, national solutions may, in the long run, stand in the way of achieving greater financial stability once financial markets have resumed their global business. On the contrary, financial market regulation needs stronger international coordination, far beyond what has been agreed by the G20 and other bodies. Over time, it may therefore be expected that an alignment of rules and practices will be achieved at

	<p>the G20 level, providing a suitable regulatory framework for the financial market realities in the post-crisis era.</p>
<b>Tailwind for local centres of limited duration</b>	<p>If this logic prevails, the tailwind local and national financial centres are currently enjoying may be of limited duration. This does not call into question their business model as regional financial centres. But it will make it harder for them to compete for clients and business opportunities.</p>
<b>Regulatory environment is key determinant of competitiveness</b>	<p><b><i>Good regulation as competitive advantage</i></b></p> <p>Providing a regulatory framework that ensures financial stability and promotes market efficiency and innovation will be a key determinant of competitiveness of financial centres going forward.</p>
<b>Stability and efficiency as core regulatory objectives</b>	<p>The soundness of a financial centre's regulatory framework has always been an important criterion for competitiveness, and it will be even more important in future. Two elements contribute to the quality of the political framework. First, effective rules and processes aimed at safeguarding the stability of financial systems are at the top of the political agenda, and a vital precondition for market participants in choosing a business location. Second, the regulatory environment optimally also promotes the efficiency of markets and creates an environment for innovation. Market efficiency not only benefits the clients of the services providers, but also contributes to the stability of markets, minimising the risks of market distortions caused by inefficiencies and of regulatory arbitrage. In particular, regulatory inefficiency can undermine the political and societal objective of stable financial markets if it prompts market participants to pursue their business outside the regulated markets so that transactions get crowded out into less regulated markets.</p>
<b>Tolerance for non-compliant jurisdictions wanes</b>	<p>One of the key consequences of the financial crisis has been that the tolerance of financial market policymakers regarding unregulated products and markets, and in particular financial centres which defy compliance with international rules regarding taxation, money laundering, corruption, terrorist financing, and prudential standards has waned. This is reflected by the G20's decision to close regulatory gaps around the world and work towards the adherence to international standards in sensitive areas. The Global Forum on Transparency and Exchange of Information, the Financial Stability Board, and the Financial Action Task Force have commenced systematic work on identifying high-risk jurisdictions and fighting non-cooperative jurisdictions, with many now subscribing to the relevant standards and prohibiting non-compliant market practices in their financial centres.</p>
<b>Higher pressure on NCJs ...</b>	
<b>... and difficult strategic choices for off-shore centres</b>	<p>As a result, financial centres whose success in the past rested on light regulation or tax arbitrage may find it hard to compete in future as international political pressure and the stigmatisation of the markets and their participants is set to rise. In the end, off-shore centres will need to make difficult strategic decisions between, on the one hand, risking increasing stigmatisation and reputational damage, or, on the other hand, fully subscribing to global standards and competing on other, more politically acceptable grounds.</p>

**International policy coordination narrows scope for competition ...**

Beyond the heightened sensitivity to security- and tax-related issues, the regulatory impact on financial centres is less clear-cut. In the course of the crisis, the need to make financial systems more resilient in the US, Europe and elsewhere provided a strong impetus for policymakers to strengthen the regulatory frameworks, and to do so, preferably, in a coordinated and consistent way. The G20 process and its conclusions bear witness to this rationale. This is an important development for market stability, but it also bears important implications for the competition between financial centres. On the one hand, policy coordination in the context of the G20 and an increasing alignment of key market rules across the major advanced and emerging economies may narrow the scope for regulatory competition and can help discourage regulatory arbitrage.

**... but outcome remains uncertain**

On the other hand, the G20 deliberations also suggest that it may be difficult for the participating economies to arrive at consistent rules in the end. Instead, national political considerations increasingly take precedence over the need to establish an internationally consistent set of rules. In that case – e.g. if G20 leaders fail to maintain the Basel accord as an internationally accepted standard for bank capital requirements, or if divergent solutions are found for the treatment of alternative investment vehicles, or for bank resolution regimes – the differences in market rules will influence the competitive positions of the financial centres located in jurisdictions such as the US, the EU or Asian countries.

**Safe haven – or overregulated market?**

The effects of heightened regulatory competition can be complex. At a general level, well-regulated financial centres with sound prudential requirements and effective mechanisms for supervisory intervention may be considered as safe havens by most market participants, especially under the impression of the crisis. At the same time, market participants are under extreme cost pressure and may react particularly sensitively to cost differentials in their operations accruing from regulatory discrepancies across borders. Others may in fact actively exploit opportunities for regulatory arbitrage. For financial centres, this raises two broad issues. First, they will find it useful to analyse the concrete impact of regulatory developments on the market participants in their business locations, and find appropriate answers to the questions this may raise. Second, and in as far as financial centres can influence the course of rule making in their jurisdictions, they can attempt to influence which types of business and business practices they wish to host in their location.

**Conclusion**

The financial crisis and its regulatory consequences are set to change the landscape of financial centres worldwide and the competition among them. Just how much change will occur depends on a number of complex and interrelated factors.

Quite certainly, the crisis will not alter the fundamental trend of a global shift that has been progressing for a number of years. While established financial centres in the US, Europe and Asia have been successful in maintaining their dominant positions as global financial centres, emerging financial markets are growing fast and capturing increasing shares of local and regional businesses. Thus, estab-

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lished centres like New York, London, Hong Kong or Singapore as well as up-and-coming centres such as Shanghai, Dubai, or Sao Paulo may emerge stronger from the crisis.

Some of the emerging centres have international ambitions, and it will not be long before Beijing, Shanghai and Dubai will rise to global importance and challenge the established centres. If anything, the crisis has accelerated this process.

At the same time, national financial market places currently benefit from the focus by market participants and policymakers on the domestic dimension. But there are indicators that suggest this trend may be short-lived. Centres which either lack the critical mass in terms of underlying economic growth or concentration of financial activity – including many continental EU markets such as Frankfurt, Paris, or Madrid – will find it harder to compete in the long run.

Finally, regulation is becoming an increasingly important factor in financial centre competition. The key question is to what extent it will be a differentiating factor in case the G20 nations succeed in achieving greater homogeneity in the regulatory and supervisory frameworks. Given the flux in the political process, this can only be judged further down the road. More concretely, however, centres whose success in the past rested to a critical extent on regulatory arbitrage, tax evasion or even illicit activities – especially off-shore centres – are increasingly experiencing strong headwind in the international political arena.

Two factors are of great importance. For one thing, more decisive progress on global standardisation of financial market regulation, and convergence and mutual recognition of existing market rules will be key to achieving a more resilient global financial market. Only if regulation and supervision keep pace with financial globalisation will it be possible to fundamentally improve the integrity of the system as a whole. And this lies in the interest of all financial centres alike. Finally, in the rivalry between financial centres, regulatory competition must play a constructive role. It should not lead to further regulatory fragmentation – the only outcome of which would be higher costs for all. And their competitive edge should not be sought via lowering regulatory standards. This would come at the expense of the financial system as a whole.

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