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Appreciation of the Role of Sovereign Wealth Funds in the Global Economy

SUMMARY: This article is intended to explore the reasons behind the accumulation of massive foreign currency assets in oil exporting and large manufacturing economies in the 2000s, and to explain how the affected countries adjusted their investment policies after the 2008 crisis in respect of their reserves. Based on the statistics and analyses available, the article demonstrates how it was inevitable in these countries to dedicate a substantial portion of the claims – in excess of the optimum central bank reserves – to set up large public funds (“sovereign wealth funds”), and to invest a part of the assets in those funds abroad. This proved to be a wise solution particularly in China, where fiscal reasons render the economy prone to overheating in any case, and the unrestricted exchange of export receivables to the domestic currency would make the money supply balloon, leading to high inflation. Although low-risk but also low-return money market investments had dominated sovereign wealth funds for a long period of time, the countries concerned have changed their investment policies since the crisis, gradually shifting their focus to capital market options promising higher returns. Owing to the tightening of regulations in the wake of the crisis, banks’ previous role in project finance was called into question, especially in the case of infrastructure project financing, which is associated with a long-term return on investment. This provided an additional investment opportunity for the funds. At the same time, through the investment activity of funds, a peculiar nationalisation process is at work in the global economy, allowing funds owned by foreign governments to interfere with the strategic decisions of private corporations.¹

KEYWORDS: sovereign wealth fund, nationalisation, China–USA economic relations, long-term financing

JEL CODES: F02, F32, F34, F62, F63

WEALTH RESTRUCTURING IN THE GLOBAL ECONOMY

During the Asian meltdown at the end of the 1990s, the trade balance of emerging economies was dominated by deficit. In the 2000s, however, the world economy saw a major restructuring of wealth. Most developed countries failed to finance their investment activity and consumption from domestic savings alone. Reliance on external financing led to the deterioration of the balance of payments in many

developed countries and an increase in their sovereign debt levels. Meanwhile, the general fall in investment rates and the deterioration of investment efficiency weighed on global GDP growth. Boasting significant surplus savings, moderately and lower developed countries, in turn, became the most important creditors of developed countries (“perverted capital flow”). By the time the financial crisis broke out in 2008 and investment activity slowed even further, the deficit of internal financing had decreased only slightly (Farkas, 2011).

As an antecedent to – and partly a reason for – this restructuring in wealth, world trade

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quadrupled during the 20 years preceding the 2008 crisis, while trade among emerging countries multiplied tenfold. China and India opened up their economies, increasing the global workforce by one billion. The investment spree and growth spurred by China's enormous demand for commodities benefited developing commodity exporters in Africa, the Middle East and Latin America especially, but a number of developed countries, such as Australia or Canada also profited from these trends.

The substantial savings of emerging countries – in particular, in South East Asia – resulted from the fact that GDP growth far exceeded the growth rate of domestic consumption. Some of these savings continued to accumulate as central bank reserves. The ballooning of reserve holdings commenced as early as 1971 – the elimination of the gold standard system –, but the process gained real momentum from 2000. The rise in reserves was especially sharp in China, where reserves accounted for 40 per cent of GDP by the end of 2006 (Cree, 2008). Another group of countries, oil exporters, had amassed substantial claims vis-à-vis the rest of the world primarily as a result of the jump in crude oil and natural gas prices.

The rest of the article attempts to take account of the factors that – given the current system of global economy – inevitably led to the accumulation of reserves, especially in emerging countries. Thus, the enormous reserves descending upon the international financial system are stemming, on the one hand, from the massive revenues of commodity exporting countries where production is based on oil as a dominant source of energy. On the other hand, in countries with large manufacturing exports – in particular, China – it was the functioning of the economic system that led to the accumulation of reserves by restricting internal consumption. Another objective of the article is to demonstrate that,

as regards managing the reserves, after 2008 the shift to longer-term investments was an inevitable phenomenon; indeed, with the faltering of credit-based consumption, international money markets were increasingly less suited to offer an alternative vehicle for the investment of official reserves both in terms of the volume and the returns of the investments.

THE RISE OF SOVEREIGN WEALTH FUNDS

Funds separated from the reserves of countries that accumulated reserves in excess of the optimal central bank reserves are generally referred to in the literature as sovereign wealth funds. (As regards what should be considered “optimal”, several approaches are available to model the “optimal level” of reserves; see for example, Dani – Törös, 2011.) There is no consensus on a more detailed definition of a sovereign wealth fund. As a starting point, we will rely on *Jen's* (2007) definition, which considers five factors to be the key features of sovereign wealth funds (SWFs):

- ① they are state-owned, i.e. sovereign entities;
- ② they have high foreign exposure, i.e. foreign currency assets;
- ③ they have no explicit future liabilities (such as pension);
- ④ they have a long-term investment horizon; (and hence),
- ⑤ they have high risk tolerance.

Among public funds, sovereign wealth funds are “close cousins” of sovereign pension funds and central bank reserves. In the case of sovereign pension funds (SPFs), however, the dominance of foreign currency content within the fund's assets is not a requirement, while SPFs tend to have some explicit pension liabilities attached to them. The main difference that separates sovereign wealth funds from central bank reserves is that official reserves are held, by definition, 100 per cent in

foreign currencies, while this is not necessarily the case with SWFs. (For instance, in specific sovereign wealth funds of Singapore, Malaysia and Canada, only a majority but not all of the assets are held in foreign currency.) Moreover, due to their constant need for liquidity and low tolerance for credit risk, central bank reserves are usually held in short-term government securities traded in large and liquid markets, which is the exact opposite of the long investment horizon favoured by most sovereign wealth funds.

It is also noteworthy that, although the assets of SWFs predominantly derive from the sale of commodities or the surplus generated by manufacturing exports, it is not unknown for countries struggling with external balance problems to operate sovereign wealth funds as well. Among studies aimed at classifying the more specific objectives of sovereign wealth funds, Al-Hassan et al. (2013) distinguished the following types:

STABILISATION FUNDS are intended to cushion the economy and the budget from commodity price volatility and external shocks in the short term (e.g. one of the SWFs in Chile, Iran and Russia). Similar to official reserves, they have a short investment horizon. For the most part, they tend to invest in fixed income instruments, primarily short-term government securities. (The only difference distinguishing stabilisation funds from central bank reserves is their separate institutional form, and since their share in the assets of sovereign wealth funds is less than 10 per cent, this type of SWFs is disregarded in the rest of this analysis.)

SAVINGS FUNDS are set up to share wealth across generations. They invest the revenues from the exports of non-renewable commodities in diversified financial instruments (e.g. Abu Dhabi, Libya, Russia). In the hope of high returns, they are willing to take high risks; most of their investments target equities and alternative instruments.

DEVELOPMENT FUNDS are meant to finance socio-economic projects (usually infrastructure) (e.g. United Arab Emirates, Iran).

PENSION RESERVE FUNDS are established to finance future pension-related liabilities. For example, Australia, Ireland and New Zealand hold a large portion of their assets in equities as a preparation for covering the increased pension costs associated with the ageing of the population. (At this point, pension-related liabilities appear only implicitly, in the form of expected expenditure.)

RESERVE INVESTMENT FUNDS (CORPORATIONS) are aimed at earning higher return by high allocations in equities and alternative instruments, while the surplus assets in the fund are still recognised as reserves (e.g. China, South Korea, Singapore).

As an implicit objective, their investment policies may also include the goal of circumventing the “Dutch Disease”, i.e. the phenomenon of exchange rate appreciation. When foreign currency flows into the economy, it typically lands in the central bank reserves because allowing the entry of surplus foreign currency incomes from abroad would raise the money supply in the domestic economy, which may accelerate inflation and/or deteriorate the competitiveness of the given country’s export industries through the appreciation of the domestic currency during the currency exchange. In order to avoid these effects, it might be a good course of action to channel the surplus assets above the safe level of reserves into sovereign wealth funds and invest them abroad.

The weight of sovereign wealth funds has increased in recent years as the official foreign exchange reserves of newly emerging economies – especially China and Russia – surged as a result of the expansion of exports and high commodity prices. Today the capital assets of sovereign wealth funds surpass the wealth of speculative hedge funds, and even in 2007 their magnitude was comparable to the combined

capital markets of Africa, the Middle East and Europe, or the capital market of Latin America (Santiso, 2008).

This magnitude and growth dynamics are all the more impressive as the appearance of the first sovereign wealth funds dates back only to the 1950s, while some hedge funds, for instance, were up and running as early as the end of the 19th century, yet, the private capital managed by them grew far less rapidly than in present-day SWFs. As private capital funds, hedge funds operated in unregulated international capital markets. Their activities and the allocation of global capital flows they entailed contributed to the emergence of long periods of boom and productivity surges in the global economy; however, their unregulated nature spawned numerous crises (Johnson, 2007).

According to data released by the Sovereign Wealth Fund Institute – an organisation studying SWFs specifically – the consolidated assets of SWFs exceeded USD 6,600 billion in July 2014, 60 per cent of which comprised the assets of funds accumulating revenues from oil and natural gas sales. Despite their growing share, as yet, they do not have a dominant role in global capital markets. In 2012 their total assets accounted for around 8 per cent of global capital market capitalisation compared to the 47 per cent share of pension funds, the 42 per cent share of global mutual funds, and the 3 per cent share of hedge funds.

Considering comprehensive global economic privatisation and nationalisation developments (including, besides the sovereign wealth funds, the roles of states and state-owned corporations), two distinct periods can be distinguished in the years between 1988 and 2013. Until 2000, governments privatised assets worth around USD 1 trillion, roughly triple the value of assets nationalised during the same period. After 2000, these two values levelled off at USD 1.6 trillion. Most of the surge in state purchases of private stock

comprised acquisitions by state-owned enterprises or by the state itself, but sovereign wealth fund investments also rose dynamically (Megginson, 2013).

The global financial crisis and the ensuing government bailouts intensified the acquisition process even further. (The most major state acquisitions in the USA involved assets acquired under the USD 700 billion “Troubled Asset Relief Program (TARP)”, including General Motors Corporation (60%); American International Group (79.9%); Citigroup (36%) and Fannie Mae and Freddie Mac (79.9%). In the United Kingdom, as part of the GBP 500 billion bank rescue package, the government acquired 60 and 40 per cent stakes in two major financial service providers, the Royal Bank of Scotland and HBOS-Lloyds TSB, respectively. In Germany, the share of the government rose to 46 per cent in Bayern LB, and 25 per cent in Commerzbank and Deutsche Telekom.)

Even before the acquisition wave of the 2008–2009 period, in 1998 – during the Asian meltdown – government interventions rose to unprecedented heights compared to the previous years. Nonetheless, the fact that nearly a half of all state purchases between 1981 and 2013 took place in the two-year period between 2008 and 2009 is indicative of the depth of the recent crisis.

As another special feature, average transaction values increased sharply after 2007, especially in Europe (United Kingdom, Netherlands, Belgium, Ireland, France and Luxembourg), Central Asia and North America. Evidently, during the financial crisis governments tended to support corporations mainly in the financial and real estate sectors. These two sectors account for 72 per cent of all acquisitions between 2008 and 2013, more than quadruple of those seen in the period of 1981–2007.

Oil-rich Gulf countries, in turn, grabbed major stakes in mammoth corporations

through their sovereign wealth funds. In 2008, Abu Dhabi's sovereign wealth fund acquired a 4.9 per cent stake in Citigroup, while Qatar's SWF purchased 15 per cent in Volkswagen AG in 2009. In the period between 1981 and 2013, acquisitions by sovereign wealth funds made up 7 per cent of all privatisation transactions, but the value of purchased assets reached nearly 15 per cent. Following the declared crisis, SWF activity intensified further: between 2008 and 2013, SWFs drove one fifth of all privatisation deals, investing triple the amount allocated in the 1981–2007 period. A half of their investments targeted foreign enterprises; thus they played an important role in the recapitalisation of distressed domestic companies. The importance of sovereign wealth funds is expected to increase further; indeed, the fiscal deficits of numerous economies and most developed countries that had launched massive privatisation programmes in the post-crisis period suggest that privatisation is likely to remain a central issue in years to come (Guedhami, 2013).

As is the case with any other government, governments running sovereign wealth funds are driven by various economic objectives depending on their assessment of the economy and the social situation, and these goals vary over time. While they typically do not seek profit maximisation, with the policy measures available they must support economic growth to ensure tax revenues and the sustainability of the equilibrium of public finances. Sovereign wealth funds may also be suitable for serving these purposes as, in theory, they have no preferences conflicting with those harboured by the owner governments. As long as the risk-weighted real yields on their investments exceed the level of the real interest rate on government debt, it may be worth allocating capital to SWFs as their activity may boost national wealth.

In the period preceding the 2008 crisis, political concerns in Western economies about

the rapid expansion of SWF assets were exacerbated by the fact that most funds were established in countries with questionable democratic standards. This fuelled apprehension about sovereign wealth funds regarding their future attitude to exercising the influence obtained even though most of their investments were passive initially, without any ambition to obtain majority influence (Truman, 2010).

As opposed to large institutional investors – such as investment or insurance funds –, sovereign wealth funds generally do not have payment obligations toward private shareholders or insured parties; therefore, their operations and investment strategies are less transparent. With a view to increasing their transparency, the Santiago Principles formulated by the working group of the IMF advise sovereign wealth funds to consult with the government of the target country before any major investment, and publish reports on their activities on a continuous basis. That notwithstanding, adherence to the Santiago Principles is not mandatory.

SOVEREIGN WEALTH FUNDS DURING THE CRISIS AND AFTER THE DECLARED CRISIS

Initially, sovereign wealth funds primarily targeted investments in the government bonds of developed countries, in particular, US government securities, which had a reputation of being safe. The volume of US security issues, however, could not keep pace with the growth of the foreign exchange reserves of emerging countries; in addition, the yields offered by US papers declined continuously amid the rapid growth of demand.

Nevertheless, owing to their ample liquidity and state investors' ability to absorb enormous amounts of funds, traditional North American and European capital markets have remained

the primary targets of SWF investment to date. However, sovereign wealth funds often set specific yield goals today, and accordingly, their portfolios began to shift, at least in part, toward riskier investments. It is indicative of the diversification of their investment policies and simultaneously, their higher risk appetite, that their investments now target private capital and hedge funds as well. By acquiring stakes in these investment firms, sovereign wealth funds assign external asset managers to manage a portion of their assets.

In the hope of higher return, they have recently eased their risk management policies, although they have not shed their aversion to risk entirely: indeed, based on their internal regulations, some funds are not permitted to invest in certain asset classes or apply speculative techniques. Accordingly, investment in OTC markets or the use of leverage may be prohibited for some funds, or they may only be permitted to apply derivatives for risk coverage.

The financial crisis improved the perception of sovereign wealth funds in developed economies, as a large part of their investments involved stabilising capital injections. Attracted by the good investment opportunity presented by inexpensive, continuously depreciating bank stocks, at the beginning of the crisis period SWF investments targeted the financial sector.

During the capital injection, banks' revenues from equity sales corresponded to the losses realised on their security holdings, raising their capital adequacy ratios at least to the approved level. Foreign investors, in turn, believed that they had acquired stakes – sometimes in excess of 10 per cent – in the largest US banks at a bargain price. In addition, sovereign wealth funds obtained significant ownership stakes in numerous industrial corporations. Their shareholdings reached the level at which they were “forced” to assume a more active role in

corporate governance (such as approving management decisions), in sharp contrast with their previous attitude of a passive financial investor (Biedermann, 2013). Through the activity of SWFs, a peculiar nationalisation process is in progress in the global economy, allowing funds owned by foreign governments to interfere with the strategic decisions of private corporations. Nationalisation was observed in the form of bank and corporation bailouts in several countries as a crisis management tool, but mainly with the participation of the “home” country. In times of crisis, protectionism emerges as a natural phenomenon; the decisions of state owners are often shaped by a desire to keep a corporation in domestic ownership, rather than allowing it to be bought up by a foreign investor. It is a different scenario, however, when another state (fund) invests in distressed companies. Obviously, the actual effect will depend on the extent to which sovereign wealth funds assume an active role as shareholders.

Many sovereign wealth funds miscalculated the depth of the crisis by thinking that they had managed to purchase assets at the cheapest possible price at the deepest trough of the crisis. Since, for the most part, they missed the moment when the crisis hit its bottom, they became some of the biggest losers of the bursting of the asset price bubble. In proportion to the assets invested, some funds realised losses as high as 30 per cent in 2008. However, even this could not break the steady accumulation of assets by sovereign wealth funds, and ever since 2007, the value of their portfolios has increased each year. The underlying reasons for the accumulation of surplus foreign currency assets did not disappear overnight either at large manufacturing exporters or commodity exporters; only the rate of growth has become more moderate temporarily.

They rearranged their investments in response to the crisis and, as a result of the losses

sustained and the high risks, the share of the financial sector declined. Although the number of transactions increased, the decline in capital value per transaction points to a more cautious investment policy, especially in 2009–2010 (ESADegeo, 2013).

Investment in infrastructure, real estate, and the shares of commodity producers has taken preference over investment in the financial sector. Interestingly, publicly disclosed data appear to capture only a small proportion (USD 50–100 billion) of direct investments by sovereign wealth funds, the actual level of which is likely to be a multiple of the numbers reported. This assumption is indirectly supported by the dynamic growth in the number of investment professionals hired by SWFs. In many cases, the same professionals had been laid off during the financial crisis and before long, they wound up assisting in the acquisition of their former companies. Co-investment has also gained ground: sovereign wealth funds open managed accounts at private equity funds through which they acquire stakes. This activity, by nature, is not included in direct investment statistics (Ohrenstein, 2013). An advantage of managed accounts is the shared interest between the account manager and its clients, i.e. the private equity fund and sovereign wealth funds. The funds of the SWFs are held on their own accounts, while relying on its special expertise, the account manager private equity fund is responsible for trading.

According to a recent survey (Invesco, 2014) conducted among more than 50 sovereign investors representing USD 5.7 trillion of assets, emerging markets (including Latin America, Africa, China, India and emerging countries in Asia) increased their share within the investments of sovereign wealth funds in the period of 2012–2014. (However, allocations to Central and Eastern Europe and Russia are expected to remain muted due to political instability.)

The research was also aimed at assessing the attractiveness of selected capital markets for investors. The United Kingdom and Germany proved to be the most attractive targets, while India received the worst score. The United Kingdom is attractive to investors for its economic stability and openness to foreign investment, and the alternative investment opportunities it offers.

Respondents expect to increase new allocations to alternative investments across all asset classes (real estate, private equity funds, infrastructure, hedge funds, commodities). Respondents perceive an especially accelerating trend toward investments in real estate and private equity funds. Besides alternative investments, equity markets were also popular in 2013, increasing the risks and lengthening the time horizons of investments. Although the share of domestic market investment was more than 40 per cent among the respondents in 2013, home market bias is on a declining trend, and sovereign investments become increasingly globalised.

ECONOMIC AND MONETARY POLICY DILEMMAS OF THE CHINESE ECONOMY

Out of the 11 sovereign wealth funds managing a portfolio of more than USD 100 billion – more than three fourth of the assets accumulated in SWFs – 4 funds are Chinese. The share of Chinese funds in the total assets of sovereign wealth funds is more than 25 per cent. (Similarly to China, Singapore owns two large funds financed from sources other than oil exports.)

Such a massive accumulation of foreign exchange reserves invested abroad demonstrates the growing strength of the Chinese economy, which propelled China to become the largest economy of the world, boasting the largest manufacturing output and trade volume

worldwide. The surplus of its trade balance has been rising practically continuously since 1990. With a positive capital balance to boot, China has amassed the most enormous foreign exchange reserves in the world – nearly USD 4 trillion in mid-2014. Since 1979 – the beginning of the economic reforms – 500 million people are estimated to have been raised out of extreme poverty. In terms of per capita GDP, China has thus transitioned to a middle income economy. Its rapid rise as a major economic power is combined with bilateral commercial ties with the United States: China is currently the second largest trading partner of the USA, its third largest export market, and its largest source of imports. The convergence of China has been in progress since 1979, China’s opening up to global economy (see Table 1).

Having said that, the evolution of China’s FDI flows followed a peculiar path. According to official statistics, after the USA, China is the second largest recipient of foreign direct

investment inflows in the global economy, and the third largest FDI exporter.

Since 1979 nearly a half of FDI flows to China originated from Hong Kong. (However, according to a number of analysts, some of the FDI originating from Hong Kong may in fact derive from Taiwan. In addition, some Chinese businessmen may take funds out of the country only to reinvest them in China where they can take advantage of preferential investment policies). The second largest source of FDI inflows to China is considered to be the British Virgin Islands (with shares of around 8 per cent), and given its reputation as a tax haven, the original source of the FDI is usually a different country. Statistics are probably more reliable in measuring FDI inflows in the case of Japan and USA, with respective shares of 6.5 per cent and around 5 per cent. (Given the uncertainty around the identity of actual investors and the fact that official statistics do not include potential outflows, the nearly

Table 1

SELECTED CONVERGENCE INDICATORS OF CHINA

Description	China			Description	USA		
	Average annual growth rate (%)				Average annual growth rate (%)		
	1979–2012	1991–2012	2001–2012		1979–2012	1991–2012	2001–2012
GDP	9.8	10.3	10.1	GDP	2.7	2.5	1.8
Gross fixed capital formation (100 million yuan)	n/a	22.4	22.6	Total domestic investment (USD billions)	3.2	3.6	1.0
Retail sales of consumer goods (100 million yuan)	15.5	15.8	15.0	Retail sales of consumer goods (USD billions)	n/a	4.4	4.1
Total foreign trade turnover (100 USD million)	16.6	17.3	19.1	Total foreign trade turnover (100 USD million)	7.9	7.2	6.2
Household deposits (100 million yuan)	24.9	20.1	16.4	Household deposits (USD billions)	11.5	9.4	11.2

Source: National Bureau of Statistics of China, U.S. Bureau of Economic Analysis, Board of Governors of the Federal Reserve System and own calculations based on the United States Census Bureau

USD 1,500 billion direct investment figure is likely to overestimate the level of capital actually invested by foreign investors between 1979 and 2013; Morrison, 2014)

It exacerbates the statistical uncertainty mentioned in relation to FDI inflows even further that the ranking of the destinations of FDI outflows is very similar to that of FDI inflows. Besides Hong Kong, several other reputed tax havens are listed among the most important destinations (British Virgin Islands, the Cayman Islands, Luxembourg). The USA and Australia are the only two countries on the list that are less likely to be targeted by Chinese investors mainly for tax saving purposes.

Even in consideration of stakeholder decisions strongly influenced by tax implications, it can be established that Chinese and American investment practices are, for the time being, asymmetrical. When comparing US investment activities in Asia and the Pacific region and the capital exports of the same regions to the USA, it is evident that US investments targeting these regions and China are far

more pronounced than vice versa. Numerous American companies continue to use China as the final point of assembly (*see Table 2*).

The Chinese economic policy achieved the convergence successes outlined above through decades of export-driven, high investment rates and the high domestic savings rates that provided the required resources. The excessively investment and export-driven economic growth, however, led to the overheating of the economy. From 2005 until the outbreak of the global economic crisis, China registered GDP growth of over 10 per cent; however, this was accompanied by an inflation rate of around 8 per cent as early as 2008. (Decades of rapid economic growth in China has fuelled a spectacular demand for energy. As a result, China became a net oil importer in 1993, recording the second largest oil imports after the USA worldwide.)

It is a specificity of the financing of China's economic growth is that it has increasingly relied on domestic savings in recent periods. By 2009, the savings rate of urban households, for

Table 2

FOREIGN DIRECT INVESTMENT FLOWS BETWEEN THE USA AND CHINA

Foreign direct investment in the USA (USD millions)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Asia and the Pacific region	204,708	230,231	246,585	269,772	294,976	325,431	323,404	346,605	409,512	427,679
of which: China	284	435	574	785	584	1,105	1,624	3,300	3,729	5,154
Share of Chinese investments	0.1%	0.2%	0.2%	0.3%	0.2%	0.3%	0.5%	1.0%	0.9%	1.2%

FDI investments by the USA (USD millions)	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Asia and the Pacific region	270,830	374,754	375,689	403,637	444,101	484,796	502,826	570,111	606,174	651,305
of which: China	11,261	17,616	19,016	26,459	29,710	53,927	54,069	58,996	55,304	51,363
Share of US investments	4%	5%	5%	7%	7%	11%	11%	10%	9%	8%

Source: own calculations based on the U.S. Bureau of Economic Analysis

instance, soared to 29 per cent compared to 18 per cent in 1995. Corporations – especially those in state ownership – are major net savers, because they do not pay out dividends to shareholders. The high savings rate and consequently, the decline in the ratio of private consumption and disposable income to GDP, can be largely attributed to two factors: China's banking policy and the lack of an adequate social security system (pension scheme, health-care system, unemployment benefits).

Since China restricts households' capital exports, they deposit a substantial part of their savings in Chinese banks. Deposit rates are set by the government, and occasionally they are lower than the inflation rate. In practice, this implies an income transfer from households to the corporate sector, as corporations take advantage of the alignment of the lending rates to low deposit rates. In addition, the lack of a social safety net also forces households to save a large portion of their incomes.

Due to the Chinese economy's propensity to overheating, the Bank of China needs to adopt restrictive monetary measures from time to time. In the 2000s the key policy rate and the required reserve ratio were raised several times in a bid to contain inflation.

In addition, the Chinese government's decision in 2006 to allow the yuan to appreciate – combined with the rising of real wages since the 2000s – contributed to alleviate the over-reliance on exports, decelerated the accumulation of trade surpluses and hence, slowed the accumulation of foreign reserves somewhat. Obviously, demand for Chinese exports was temporarily restrained by the global economic crisis itself.

At the same time, the appreciation of the yuan raised concerns among Chinese politicians about the ability of Chinese products to retain their competitive prices. So far, it appears that their concerns were unfounded. US interest rates – to some extent, precisely due

to China's massive US money market investments – remained low both before and during the crisis, encouraging American households to maintain their level of consumption (even by resorting to borrowing), which continued to generate demand for Chinese merchandise. (For the same reason, through the dampening effect of its money market investments on interest rates and the ensuing growth in outstanding borrowing, China itself contributed – albeit inadvertently – to the real estate surge materialising in the USA before the crisis which, eventually, led to the events of 2008.)

Besides the sheer enormity of accumulated foreign currency assets, remunerative investment is also hindered by the less than optimal composition of the assets: the lack of adequate diversification. As a matter of course, for a long time China held its foreign currency assets in investments denominated in USD – the key currency –, around 70 per cent of them in US treasury bills. Even today, China holds more than a third of its portfolio investments – around USD 1.3 trillion in 2013 – in US government securities; however, it reduced its low-yielding Treasury bill portfolio to 40 per cent.

As the USA stepped on the path to rapid indebtedness in the 2000s, the portfolio investments of China began to depreciate parallel to the weakening of the USD. This was accompanied by a sharp fall in the yields on US government securities, primarily because of the heightened Chinese demand in the first place. The yields fell short of even the Chinese inflation rate, generating additional financial losses for China. It was for this reason that China began to diversify its foreign investment portfolio gradually (Dani – Törös, 2011).

Additional financial losses were sustained because, for the sake of the public offering, the interest paid on the sterilisation bonds issued in China in order to alleviate inflationary pressures had to be determined lower than those

that could be achieved by China, as an investor, on its USD denominated reserves.

The effect of the high interest rate paid on sterilisation bonds resembled that of central bank base rate increases in that it attracted additional foreign investors to this market (even illegally), which put an appreciation pressure on the yuan. Expectations about an actual appreciation of the currency spurred a further inflow of foreign capital, generating a speculative spiral (Cognato, 2008). Continued speculative capital inflows in recent years, however, would continue to necessitate large-scale sterilisation, presumably resulting in further financial losses (Gábor, 2010). By 2012, the number of qualified foreign institutional investors (those permitted to invest in China) rose to more than 200 compared to 33 in 2005, pointing to a further increase in investments. Chinese policy-makers cannot afford to ignore this upon formulating the monetary policy.

In the past, the speculative inflow of foreign currency forced the Bank of China to buy up the currency, which increased domestic money supply and hence, encouraged banks to increase lending. This led to the formation of spare capacities, for instance, in the steel industry (Selfin et al., 2011), or generated asset bubbles in the real estate market (Martin, 2008). Contrary to the most developed economies which restrained lending during the crisis, outstanding borrowing in China soared to 132 per cent of GDP during the crisis, surpassing even the level observed in developed countries. 85 per cent of the loans were granted to corporations. The need to contain this expansion often forced China's government to adopt administrative restrictions in respect of the credit conditions applicable to certain sectors.

Despite the steps taken forward – laden, as they were, with regulatory difficulties –, the depth of financial intermediation (the total value of China's financial assets as a share of GDP) remains only half of the average of

developed economies. The yuan is yet to become convertible, and current and capital transaction restrictions also hamper the yuan's rapid transformation into an international currency (Dobbs et al., 2013)

In addition to changes in its monetary policy, the Chinese government needed to apply fiscal measures as well to stabilise GDP growth which, owing to the subdued demand for exports during the crisis, was only conceivable by expanding domestic demand. Increased public spending on infrastructure projects became a tool for providing fiscal stimulus, primarily by way of railway developments. This policy was a success in the sense that the key economic indicators did not show a downturn until 2009. However, excessively increased public investment combined with drastically raised budgetary expenditures overheated the economy once again (Csanádi, 2013), leading to a surge in inflation and the mounting indebtedness of local governments. Since new capacities also contributed to the dynamic growth of external trade after 2009, China faced the recurring problem of how to invest its ballooning foreign exchange reserves profitably.

SPECIFICITIES OF CHINESE SOVEREIGN WEALTH FUNDS

The state-owned China Investment Corporation (CIC) was established in 2007 as a sovereign wealth fund to manage a part of surplus central bank reserves and increase the return on foreign exchange reserves. Although American investments still account for around a half of the foreign investments of the fund due to its initial investment policy, as a long-term investor it is now keenly interested in infrastructural and environmental projects and real estate investments as well (Rao, 2013).

Apart from its foreign investment activity – for which CIC International was established

originally –, CIC recapitalised the domestic banking sector during the crisis, acquiring a stake in excess of 40 per cent in Chinese state banks. Through its investments held in its investment corporation, Central Huijin, CIC directly controls the four large Chinese state banks, which represent 65 per cent of the Chinese banking market. The largest owner of the investment company is the State Council of the People's Republic of China. While CIC maintains that its foreign investments do not have a political nature, it openly admits that its domestic investments were political; instead of aiming to achieve profitability, they were meant to rescue state banks and resolve their capital position.

At the inception of CIC, instead of executing a direct recapitalisation from the foreign exchange reserves, the Chinese government issued bonds worth CNY 1.6 billion, and from the proceeds it purchased USD 200 million from the Bank of China. This amount was then used as the equity capital of CIC. Initial yields on the 10–15 year bonds ranged between 4–5 per cent; thus, in order to achieve a return, China expected to receive at least corresponding yields on the investments by CIC from the start. This is an unusual procedure upon the launch of sovereign wealth funds, which typically commence their activities without any explicit payment obligations. In combination with the weakening of the dollar during this initial phase, these stringent yield requirements translated into even higher expectations (Santiso, 2008). The fund failed to meet these expectations, and had produced losses even in 2011, before its yields soared to 10 per cent after a major portfolio diversification in 2012. From 2011, the permitted horizon of long-term, higher-return investments was raised from 5 to 10 years and parallel to this, the fund increased direct investments in private corporate stock, private equity funds, hedge funds and real estate investments.

Since the USA has a protectionist attitude in respect of China's investments aimed at the USA's energy and telecommunications sectors, China has shifted its focus to Europe in recent years. Among the European countries, the United Kingdom is the most welcoming of Chinese investments, especially in its infrastructure and industrial projects. This arrangement also benefits the activities of European corporations in China because, given the closer commercial ties, they have easier access to China's product and services markets (Wenbo, 2013). While China's investments in Europe were largely driven by profit considerations, Chinese investments in emerging countries are also motivated by strategic interests: securing energy and natural resources to power the Chinese economy over the long term.

In terms of the funds managed, China's State Administration of Foreign Exchange (SAFE) is even bigger than CIC. At the same time, the organisation is also responsible for China's foreign exchange regulations. As regards the investment activity of China's two major funds, in addition to investments in the financial sector, both funds increasingly tend to invest in foreign commodity producers, as well as the sectors of technology and real estate. In particular, SAFE has a special focus on the equity market of the United Kingdom. Additional important funds include the sovereign wealth fund of Hong Kong, the China-Africa Development Fund (established in 2007 mainly for financial investments in Africa) and the National Social Security Fund (NSSF), which was set up in 2000.

Besides the investments of sovereign wealth funds abroad, Chinese companies themselves pursue activities in foreign countries, participating in projects and making investments. While in the developed regions of the global economy the goal of Chinese corporations is to obtain technology, they move to Africa for as yet unexplored minerals, in consideration

of the massive commodity and energy demand entailed by the rapid economic growth. In their export markets, large Chinese export corporations need services (transportation, insurance) and they also aspire to obtain control over such service providers. In order to improve their competitiveness and achieve higher sales prices, emerging Chinese corporations strive to acquire recognised Western brand names. Sometimes they seek cheaper labour markets (e.g. in Vietnam) than the domestic market (Artner, 2010).

Amid the spectacular economic growth, real wages have been rising dynamically in China for a longer period of time. Rising real wages and the export competitiveness of the manufacturing sector inevitably led to the accumulation of foreign exchange reserves and the appreciation of the yuan, which forces the Chinese government to implement an economic transformation: China needs to switch from an extensive, excessively export-oriented growth pattern to a development path that is rooted in human capital and R&D, and is more aligned to domestic household demand. The capital for this is readily available; moreover, through its sovereign wealth funds, China may also become the most important creditor of emerging countries.

EXPECTED TRENDS IN THE NEAR FUTURE AND IN THE LONGER TERM

In terms of balance, the path followed by the USA in the 2000s was the exact opposite of the one taken by China. In contrast with the enormous surpluses of the balance of payments and massive foreign exchange reserves in China, the USA is struggling with a significant balance of payments deficit, mainly due to the growing deficit of its trade balance vis-à-vis China. While it was able to improve its external positions in several

regions of the global economy after the crisis (despite its dependence, even in relation to OPEC countries), as regards China, its import demand – which deteriorated during the crisis – recovered in the period of normalisation; thus the deteriorating trend of the USA's balance of payments position was only temporarily slowed by the crisis (*see Chart 1*).

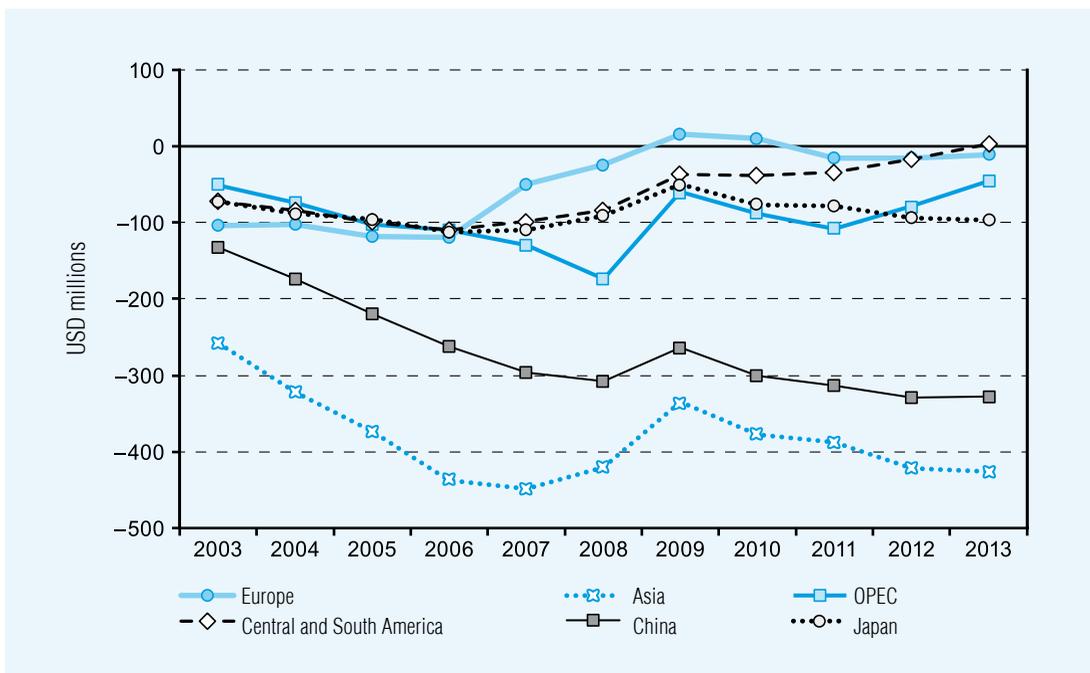
The previous trend of securing financing (due to the insufficient level of domestic reserves) mainly through Chinese capital inflows also persisted (*see Chart 2*).

Since 1969 – the last year that closed with a budget surplus – the USA has typically pursued a fiscal policy of overspending. However, it was not only the amounts spent on crisis management and bank bailout packages that boosted the budget deficit. Some of the deficit can be attributed to programmes and reforms such as state aid granted to funds for the financing of healthcare services for the elderly and the poor; the extension of the health insurance system to the 45 million Americans yet uncovered; and the improvement of the general financing conditions of the healthcare system and public education. Owing to regular fiscal deficits, the other main imbalance of the USA is associated with the continuous and accelerating growth of public debt seen since the Reagan administration. The insufficiency of domestic savings is also demonstrated by the fact that more government bonds have been purchased by foreigners in the past twenty years than by domestic investors, and today two thirds of US government securities are held by non-residents (Szilágyi, 2009).

Financing burdens were only escalated by the unprecedented monetary and fiscal expansion launched by the American government at the outbreak of the financial crisis. Bank bailouts and fiscal stimulus packages conserved America's equilibrium problems. Since these problems are not expected to improve significantly in the near future, the unique

Chart 1

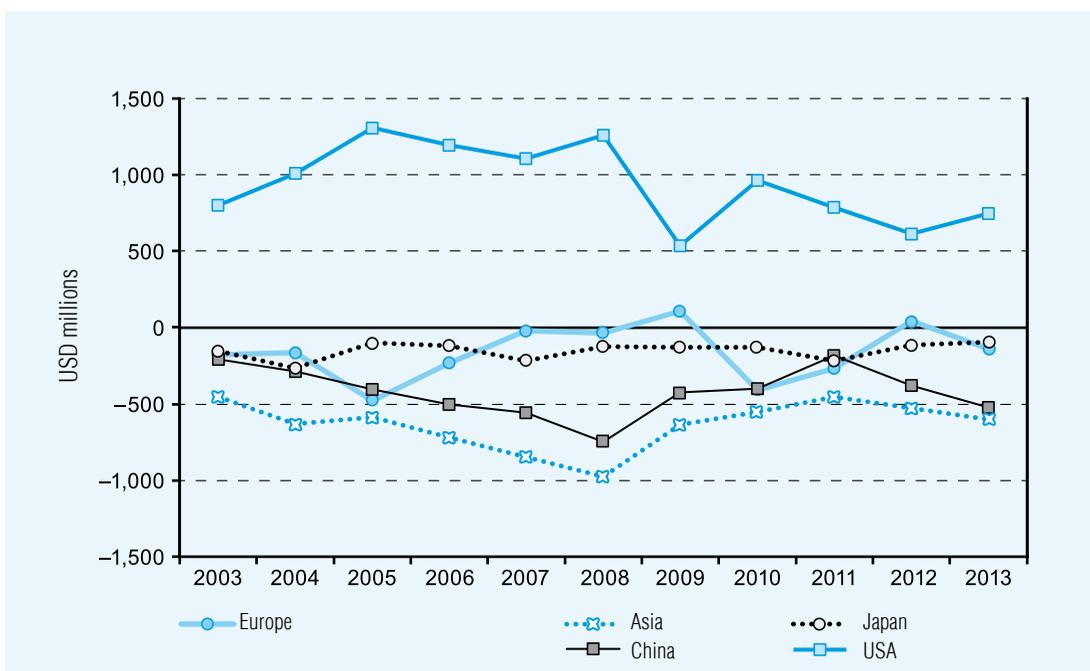
CURRENT ACCOUNT BALANCE OF THE USA



Source: own editing based on the U.S. Bureau of Economic Analysis

Chart 2

EXTERNAL FINANCING REQUIREMENT AND MAIN CREDITORS OF THE USA



Source: own editing based on the U.S. Bureau of Economic Analysis

relationship between the USA as China's massive export market and China as a major exporter and creditor is unlikely to change over the short term, and the interdependence of these two countries is expected to persist.

In a certain sense, China was taken hostage by itself in this mutual reliance: due to the sheer size of its reserves invested in the USA, it must do everything in its power to protect the value of its investments. A weak dollar would hurt China's interests as it would devalue its immense reserves in the USA. Developments in the dollar's exchange rate – which, in part, are dependent on China itself – pose one of the greatest challenges for the Chinese government.

In view of the Fed's fiscal tightening, the continuous tapering of asset purchases, the wave of interest rate increases expected from 2015 and the ensuing rise in US capital market yields, analysts envisage, for the most part, the strengthening of the US dollar. In the post-crisis period the moderation of household indebtedness and the recovery of household consumption point to the gradual acceleration of American economic growth.

In December 2013 the Fed decided to taper off its asset purchases in the course of 2014. Under its asset purchase programme, the Fed purchased long-term government securities and mortgage bonds in order to ensure low interest rates over the long term and hence, facilitate the acceleration of economic growth. The first phases of the asset purchases by the Federal Reserve System (Fed) – the central banking system of the USA – have largely contributed to the soaring of certain capital market segments in recent years, especially as regards the corporate stock prices of developed countries.

In its guidance the Fed had indicated that it would maintain its quantitative easing as long as unemployment is over 6.5 per cent, but the US economy was close to bringing

down the rate to this threshold in the first few months of 2014 already. Since in the Fed's assessment economic growth is still fragile, it is unlikely to increase interest rates at a fast pace despite the favourable unemployment figure (Questor, 2014).

From a strategic perspective, it is of great significance that the United States aspires to become one of the leading oil producers of the world in the next two years and, by 2035, it may become self-sufficient in this regard. Projections regarding the size and extraction capabilities of shale oil and shale gas resources vary widely; however, if the plans come to pass as scheduled, the strengthening of the American currency may persist over the long term.

China is expected to improve its economic performance at a slower rate compared to its previous performance and its GDP growth may dip below 7.5 per cent in 2014. If the scenario presaging the medium and long-term strengthening of the US dollar materialises, it may secure the value of existing Chinese investments in the USA over the long term. China, as an investor, may achieve an even better position if it gains better access to the non-financial sectors of the US economy.

SUMMARY

The weight of sovereign wealth funds has increased in recent years in parallel with the robust accumulation of the official foreign exchange reserves of China and Russia in particular. The sovereign wealth funds owned by China dispose over nearly a quarter of the assets held in SWFs worldwide. The funds rearranged a part of their investment portfolios in response to the crisis and, owing to losses sustained and high risks, the share of the financial sector declined. At the same time, however, they acquired significant stakes in numerous industrial corporations.

The Chinese economy achieved its successes through decades of export-driven, high investment rates and the high domestic savings rates that provided the required resources. In terms of balance, in the 2000s the USA followed a path directly opposite the one taken by China, facing massive balance of payments deficits. In the context of increasing globalisation, the positions of the two nations in financial markets became mirror images of each other; Chinese capital inflows became the main source of finance for US deficits. Over the medium and long term, this situation is not expected to change significantly unless the United States, relying on its new resources, becomes one of the leading oil producers of the world in the next few years, and subsequently becomes self-sufficient.

European banks had borrowed heavily in US dollar during the pre-crisis period, and used the funds for their own lending operations worldwide. A substantial part of these loans were used for the long-term financing of infrastructure projects in emerging countries. After the outbreak of the crisis, banks gradually began to refrain from these activities as their own sources of credit dried up. As a result, many emerging countries – which do not operate sovereign wealth funds – face difficulties in financing their projects. Consequently, the global economy currently lacks the institutional system required for long-term financing, and is not expected to provide access to an adequate volume of credit to satisfy future needs. This is particularly relevant at a time when there is an increased need for

developments securing renewable energy resources in order to manage the deficiencies in primary commodities, environmental pollution and the climate change. In numerous emerging economies, there is a comparable need for investment, in particular, infrastructure projects, that would ensure that the urbanisation entailed by the rapid increase in household income is combined with acceptable living conditions (Aglietta, 2013). All these development needs require long-term financing. Finances need to adjust to these trends.

Although the global crisis had demonstrated that global financial markets are not self-regulatory, in the lack of a common political will on the part of the key countries and groups of countries, a uniform international regulation of global markets cannot be expected over the short term. Besides banks, large pension funds are not expected to ensure an adequate level of long-term financing either; indeed, with the ageing of the population they themselves struggle with undercapitalisation, as do large insurance companies because of the solvency requirements. Sovereign wealth funds appear to be the most likely candidates to fill the financing gap; since their purpose is to preserve the surplus assets of nations – as materialised in the foreign exchange reserves – for future generations, they take a long-term approach by definition. Sovereign wealth funds may partly replace bank credit, channelling capital from Asian countries with abundant surplus savings to fast-growing but desperately under-financed emerging economies.

NOTE

¹ The author wishes to thank Mária Csanádi and Éva Voszka for their valuable comments on this article.

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