FX wars, currency wars & money wars

Part 1: FX wars vs. currency wars
USD vs. EUR vs. RMB vs. ...

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Document for the exclusive attention of professional clients, investment services providers and any other professional of the financial industry

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January 4, 2020 (*))

Foreword

The concept of "currency war" was officially coined by the Brazilian Finance Minister Guido Mantega in September 2010, a little less than 10 years ago. He considered that emerging markets were squeezed by a combination of a weaker US dollar and an undervalued Chinese renminbi. However, this concept is not totally new as it refers, to name a few, to the competitive devaluations of the 1920s - 1930s, to the competition in the 1970s between the dollar, the yen and the deutsche-mark (among others), all periods whose outcome is not envied. The currency war, however, goes far beyond mere FX parities. It also refers to the notion of leadership, to the ability to finance "easily" economic expansion (internal and external) and external deficits. The fact of being an international currency gives homework, but it gives rights, which it is easy to abuse. This was the case in the 1970s, and the European countries in particular, partners of the United States, had finally decided to drop the dollar, tired of the benign neglect of the United States on exchange rates. This had upset the International Monetary System (abandonment of the reference to gold, two devaluations of the dollar...). Since that date, the international currency has always been associated with notions of collective responsibility

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and risk of excessive domination ... But this does not hide the advantages associated with this status. This explains why the United States is committed to the international role of the dollar (without any sharing if possible) and why also countries, China and the Eurozone in the lead, want to develop this role for their respective currencies and compete with the US dollar as a reserve currency, invoice currency, reference currency... This is one of the main issues of the coming decades ... and this is the subject of this document (Part 1).

But the currency war does not stop there. The world has entered a "total digital era", and currencies are no exception. For a little more than 10 years, new currencies have emerged (Bitcoin is the most emblematic cryptocurrency alongside with electronic and local monies) and high-performance technologies have been developed, making payments, which are backed by cryptocurrencies, much more efficient, relatively transparent and extremely fast. Although these new (and numerous) currencies do not account for a large share of transactions (in volume and value), central banks are watching closely, concerned about potential competition for their own currency (central bank money), worried about potential impact on monetary policy, banking systems and financial stability, interested in the opportunities offered in the environment of low interest rates, attentive to the necessary regulation of crypto-assets, and curious about the technologies used ... technologies that they themselves could exploit for their own cryptocurrency project. Indeed, the list of central banks involved in such projects is growing steadily. Competition between fiat money and digital money will be the subject of the second part of this study (Part 2 forthcoming soon).

> "The U.S.'s labeling of China as a currency manipulator signifies the trade war is evolving into a financial war and a currency war, and policy makers must prepare for long-term conflicts. "The U.S. believes, in a geopolitical point of view, it's being contained by China with China's holding of its sovereign bonds. That means the U.S. is not completely without weakness"
>
> *CHEN Yuan, former deputy governor of the People's Bank of China (PBOC) "China Finance 40" meeting; Yichun, Heilongjiang - August 10, 2019*

Abstract (Part 1)

The USD is by far the most important international currency, although declining in recent years, especially as regard central banks' FX reserves. New currencies have emerged (of which the RMB), central banks diversify their portfolios (especially in Asia), while some "old" currencies gain ground (the JPY and gold, to some extent). Moreover, even if two contenders exist at present (the euro and the RMB), the USD is the only currency to be considered as an international currency as regard all its characteristics: reserve currency, invoicing currency, vehicle currency, reference currency ... It is the only one to be worldwide accepted, and the US, through structural (recurrent) fiscal and current account deficits (and through the balance sheet of the Fed), never stopped feeding the global liquidity market (a major difference with Germany, for example). However, **the international status of the USD might diminish further in the long term** depending on 6 conditions:

- The pursuit of FX reserves diversification by Asian central banks into alternative currencies and into gold;
- The continuation of the internationalization of the RMB as a contender of the USD, alongside with the Euro;
- The capacity of the Eurozone to improve the institutional and economic set-ups:
- The political and economic will of the Eurozone (especially Germany);
- The difficulty of the US to attract international savings (as they do since the 1970s) to finance structural twin deficits;
- The foreign policy of the US administration;

To reinforce the international role of the Euro, Europe has to consolidate and improve the euro-area institutional set-up. Some examples: the completion of the **European Banking union**, progress on **capital markets union**, better **credit quality of "peripheral"** sovereign bonds. The issuance of a **common "federal" bond**, with a role similar to that played by Treasuries in the US, would significantly increase the international role of the euro. Progress in the **set-up of euro-area economic policy**, in its fiscal and structural components, and **a more united, and thus more effective, external and defence policy** would favour greater international use of the euro. **Speaking one voice** more regularly on critical issues would also be a "plus" for the euro, without any doubt.

If China wants the yuan to become an international currency, some prerequisites are to be met: capital market liberalisation, capital account openness, capital controls abandoned, full convertibility of the currency... However, the emergence of a true international currency is a very long process. Moreover, in history, financial instability seems to be the only factor that can change quickly the sharing of the world of international currencies.

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Introduction
Do not confuse FX wars and currency wars

The **foreign exchange war** is the result of an outbidding in the depreciation of exchange rates. The **currency war** is essentially related to issues of leadership, power[1]… while the FX rates war has a short-term vocation, the currency war has a more obvious long-term strategic vision. This article will mainly focus on this type of currency war.

The FX rates war and competitive devaluations

FX rates war results from a bidding war in the depreciation of exchange rates. This bidding is a response to decisions of a country that may have several different origins:

- **A country may be tempted to correct differences in competitiveness**, and partner countries will follow suit. This was the case during the competitive devaluations which, in the course of history (in the 1930s, for example), provoked the bidding war between the countries concerned and led to a general impoverishment and a strong financial instability, even a crisis. It should be noted that the phase of protectionism, through exchange rate protection, tariff measures or non-tariff measures, occurs most often in a period of contraction of growth or contraction of world trade: in phase of decline of trade in volume and / or in value, it is no longer a question of commercial aggressiveness to win growing markets, but rather incentives to take steps to impact competitors' market shares, hence protectionism. Overbidding ends up having negative effects on trade, growth and employment.
- **A country may also try to offset, through exchange rate declines, trade measures deemed too restrictive and unbalanced the equilibrium of a country**. In 2019, for example, China stopped curbing the depreciation of the yuan when the United States accelerated tariff increases (while they tried to maintain RMB stability in the previous quarters despite the first set of US tariffs).
- More recently, in the past few months, in the case of Europe and the United States, we can see that **the currency war is the result of an escalation of aggressive monetary policies**.
- **Exchange rate policy can also accompany reforms** that have a negative impact on domestic demand or the competitiveness of companies.

[1] *The international role of the currency is one of the components of leadership, with military forces, population, GDP, human development, corporates and brands, banks, soft power, smart power … For further analysis on leadership and power, please refer to ITHURBIDE Ph. (2019) "Who Will Lead the World Economy? US vs EU vs China - USD vs. EUR vs RMB", Amundi Discussion Papers Series, DP-38-2019, April, 62 pages.*

Currency depreciation is then considered as a good way of boosting foreign demand, which is supposed to replace domestic demand. This is the trade-off between internal devaluation (heavy structural reforms, control / decline of wages and pensions, tax increases ...) and external devaluation (lower exchange rate). During the European debt crisis in 2010, and in the absence of any power over the exchange rate, Spain, Portugal or Greece had no choice but to opt (under the constraint of their creditors) for internal devaluations.

- **A depreciation of the currency can be perceived as an attempt to "boost" growth** through exports when fiscal space (likely to support consumption or investment) is low or non-existent ... Note the impact on economic activity will be visible if non-price competitiveness is high and companies do not use currency depreciation as a means to restore insufficient margins (in the 1980s, the successive devaluations of France did not restore the trade balances, precisely because of margin behaviour of exporters).

To sum up, foreign exchange wars result of an outbidding in the depreciation of exchange rates: a correction of competitiveness gap, the will to boost growth, a compensation of tariff or non-tariff measures from abroad, a measure to accompany structural reforms, the of last chance measure when the rest has not worked or when the room for manoeuvre (monetary, fiscal and tax policies) has disappeared. US and European monetary policies may, in some ways, be considered as different ways to avoid an appreciation of the domestic currency: in the US, a total turnaround - in a few weeks - on the appreciation of the equilibrium interest rate, on the risk of recession... and in the Eurozone, new rate cuts, new QE, new TLTRO, tiering of the deposit system.

The currency war: EUR, USD and RMB competing for an international role

In less than 20 years, the IMS (International Monetary system) has radically changed:

- **Before the end of the 1990's**, the supremacy of the USD was indisputable. The euro did not exist, and China was "simply" the factory of the world.
- **From the end of the 1990's to the middle of the 2010's**, there was a "gentleman agreement" between China and the US. The US accepted to run a large trade deficit with China, while China invested the surplus into US assets. This agreement, called "Bretton Woods 2" benefitted to both the US and China. The business model of China has changed (more services, less export-led growth and more internal demand-led growth, lower potential growth), trade surpluses have shrunk, and China invests less in US assets. The Bretton Woods 2 disappeared in 2014, when Europe becomes the creditor of the US, replacing China in this role.

- **With the Trump Administration, the US model has changed and the International Monetary System moved from a cooperative model (Bretton Woods 2) to a non-cooperative system**: the US came back to a mercantilist approach, with non-tariff measures since the Great Financial Crisis (GFC), and with tariffs for the past two years, with the Trump Administration (Chinese, Japanese and European products are targeted). In substance, the US do not accept to run large trade deficits with Europe (and China), and would like to force Europe (and China) to buy US products. Bretton Woods 2 is dead, but there is no Bretton Woods 3 with Europe or China.

In the current non-cooperative international monetary system, the US dollar is still "the" international currency, although declining, while the Euro, the RMB and other currencies (including the JPY or the CHF) struggle to improve their rank.

I. International currencies: A quick refresher

1.1. What does theory tell about international currencies?

Before assessing the current situation, we should explain what an international currency is. Its **four main characteristics** are:

- **Liquidity**: its market must be liquid. The euro and the dollar are very liquid.
- "**Acceptability**": the currency must be accepted everywhere. Undoubtedly, the lack of full convertibility of the yuan is a drawback.
- **Stability**: it is a complex concept given that currencies fluctuate by pair. As regard an international currency,"stability" refers to the economic situation of the country, to its structural imbalances…
- "**Predictability**": it is also a complex concept that refers to the country's ability – or will – to manage its currency. Regarding exchange rates, the United States tend to have a more "laissez-faire" attitude than Europe and China.

Besides, an international currency has **four different functions**:

- **A reserve currency** (for central banks).
- **An intervention currency**, used by central banks to curb undesired FX rates movements.
- **A settlement currency**: the true value of an international currency is determined by its ability to establish itself in third-party trade.
- **A reference currency**, especially for international debt and commodities.

Table 1
The internationalisation use of a currency

	Private use	Official use
Medium of exchange	Invoicing trade and financial transactions	Vehicle currency for foreign exchange intervention
Store of value	Currency substitution	International reserves
Unit of account	Denominating trade and financial transactions	Anchor for pegging local currency

Sources: B.J. Cohen (1971) ; P. Kenen (1983)

What does theory tell us about the prerequisites for an international currency to emerge?

Several criteria are to be met, and they show how far China is from having an international currency (Efstathiou – Papadia (2018)):

- **Size and liquidity:** to become an international currency, the size of the economy (in terms of GDP, volume of trade…) is important. Large and liquid markets reduce transaction costs and attract participants (positive for both vehicle and investment/financing functions). A large supply of debt matters for the choice of the safe asset (which reduces the cost of borrowing via the liquidity premium) and, as a consequence, for the investment / financing and reserve functions.
- **Sustainability of debt:** good fiscal situation will affect the choice of the safe asset.
- **Political will and central bank's behaviour to promote the international use of the currency**.
- **Stability:** financial stability of the issuing country comparing with the other countries is also critical to enhance the store-of-value role.
- **The removal of obstacles to the free movement of capital**: full convertibility of the currency, openness of the capital account.

As B. Coeuré mentions, "*most of these factors change softly, slowly… and they thus explain better long-term phenomena than short and medium-term changes in the use of international currencies. Financial stability, or rather financial instability, is the only factor that can change quickly enough to cause relatively fast changes to the shares of different currencies*".

1.2. International currencies - advantages and disadvantages / dangers: a recap

The literature on the benefits of an international currency is particularly rich. All studies conclude that being an international currency cannot be effective on simple decree. The process is long, and many prerequisites

are required: liquidity, political will, acceptability, stability, resilience … In addition, the competition between currencies can prove, in certain periods, particularly fierce. We are living in one of these periods, with the weakening of the dollar, the probably irreversible rise of the Chinese renminbi, and the existence of additional potential for the euro.

Beside the advantages that the international currency provides to the country that issues it (global natural demand for international money and greater capacity to finance deficits or economic expansions, the possibility of avoiding a greater part of the exchange risk, the possibility of "neglect" towards the price of its own currency, the existence of "safe haven" assets…) and to other countries (access to an ultra-liquid capital market, use of worldwide accepted assets in any kind of transaction if needed …), an international currency carries with it some dangers, of which the dependence on foreign holders of international currency-denominated assets, the greatest inability to control capital flows … The table below gives a synthesis of advantages and dangers of an international currency.

Table 2: International currencies advantages and disadvantages / dangers: a recap

International currency: the advantages	**International currency:** the dangers
1. Thanks to the billing process, the internationalisation of the currency gives the country's exporters / importers the possibility to limit exchange rate risk and even to transfer the risk to the foreign customers / providers.	1. With an international currency, there is a good chance the country's public debt to be in the hands of foreign investors. As a consequence, periods of high volatility and depreciation of the currency are inevitable, Mistrust may also generate financial crises… This is even worse for countries having relatively small - and vulnerable - financial markets compared to the size of their economy (it is not the case for the US or the Eurozone).
2. Thanks to the internationalisation, the domestic capital markets expand much quicker than foreign markets, a strong advantage for domestic entities.	2. The country cannot control capital flows anymore. Currency internationalisation usually moves in tandem with the absence (reduction) of capital controls, which limits the capacity of the central bank to control domestic interest rates. Chinese officials have no doubt that in mind…

Table 2: International currencies advantages and disadvantages / dangers: a recap	
International currency: the advantages	**International currency:** the dangers
3. It allows domestic firms and financial institutions to access international financial markets “without incurring exchange rate risk and to borrow more cheaply and on a larger scale than they can at home” (P. Kenen, 2011).	
4. It benefits to the domestic economy, thanks to a larger and more profitable financial sector, able to serve the domestic non-financial sector better.	
5. Currency internationalisation will allow the country’s government to finance its budget deficit by issuing domestic currency debt on international markets, and not by issuing in foreign currency denominated instruments. As a consequence, at the opposite of numerous countries, internationalisation of the currency may allow the government to finance current account deficits without drawing on its reserves.	
6. The country issuing an international currency can invest abroad very easily, the expansion being financed by countries targeted for FDIs	
7. Last but not least, history recalls that it allows the country to adopt benign neglect attitude for its own currency, forcing economic partners to protect FX rates. The US is certainly a good example of this laissez-faire.	

II. US, Japan, China and Eurozone: an overview of the competitors

2.1. United States: make the US dollar an undivided realm

It was the 1944 Bretton Woods Agreement that brought the dollar into its current position as an international currency. Prior to this agreement, most countries were bound to the gold standard and their governments guaranteed the exchange of their currency against gold on demand. After the Second World War, the developed countries met in Bretton Woods, New Hampshire, to establish new monetary rules and a new international monetary system, which was desired to be more stable and capable of managing reconstruction and the future economic expansion. The Bretton Woods agreements led to the fixing of the exchange rate of all currencies vis-à-vis the US dollar. At that time, the United States held the largest gold reserves. This agreement has also allowed other countries to support their currencies with dollars rather than gold and to change the role of the dollar in the global economy. The US dollar has quickly become the world reference, to the great advantage of the United States. By no surprise, since then, the United States has clearly demonstrated its desire to maintain the advantage to print an international currency. The capacity to finance deficits (especially following crises) and the need for US economic partners to manage FX rates vs. the USD were at paroxysm when J.B. Connally, US secretary of Treasury declared in 1971 to European finance ministers "*the dollar is our currency, but it is your problem*". Europe and Japan, among others then stopped protecting the external value of the USD. In December 1971, the Bretton Woods Agreement is officially abandoned, the convertibility of the USD into gold is abandoned, and the USD is devalued (a second devaluation will occur in February 1973). A multipolar system (a so-called "monetary polycentrism") surfaced, with the DEM (Deutsche-mark), the JPY (Japanese Yen), the CHF (Swiss Franc), the GBP (Sterling Pound) and the FRF (the French Franc) gaining ground as international currencies. However, due to the size and role of the US economy and to the lack of liquidity of alternatives to the USD, the US currency never stopped being the major international currency. Moreover, the US never stopped feeding international markets with USD assets, even through - thanks to- higher debt and higher deficits ...

The capacity to finance higher deficits and debt is undoubtedly, for the US economy, one of the major advantages of the USD as an international currency:

- US Treasury bonds are systematically considered as safe haven, as well as the dollar, even when the crisis comes from the United States (this was the case of the great financial crisis of 2008);

- US deficits are easy to finance as long as there is a "natural and recurrent" demand for US dollars (the privilege of an international currency).

The two advantages mentioned above help the US administration in the way they can manage crises and recessions better than any country else, and also in the way they can weaken their economic partners. Unlike the JPY, the GBP, the CHF, the RMB and to a lesser extent the EUR, the dollar is a "full" international currency (the only one), and the US are reluctant to share the advantages of printing an international currency. The disputes with China (tweets, tariffs, non-tariff measures, trade agreements ...) are part of this reluctance.

2.2. Japan: the story of a failure

In 1984, the "Yen-Dollar Working Group" (officially the "Joint Japan-US Ad Hoc Group on Yen-Dollar Exchange Rate, Financial and Capital Market Issues") pleaded for some internationalisation, through deregulation of the domestic financial markets and the internationalisation of Tokyo financial markets. This group had been settled to curb the large and widening trade imbalances between Japan and the US. The yen was supposed to be undervalued because 1) Japan was not attractive to international investors, and 2) the currency was not attractive to international users (Frankel (1984)). The Japanese authorities did not necessarily agree with such an assessment, but went along because the alternatives (such as further trade concessions) were far worse (Takagi (2011)). The US position was to internationalise the yen (with, if possible, an appreciation of the currency) and to open Tokyo's capital markets (to allow US financial firms greater business opportunities in Japan). The Japanese position was not very different to the US one, and the final report recognized the necessity for both liberalisation and internationalisation. The government considered the yen internationalisation would be beneficial to the country for several reasons:

- It would reduce exchange rate risk for Japanese firms;
- It would strengthen the international competitiveness of Japanese financial institutions;
- It would facilitate the development of Japanese markets and Tokyo as an international financial centre;
- It would lead to greater stability of exports from Asian countries, and contribute to their economic stability;
- A greater use of the yen internationally, with the USD, would also contribute to a more stable international monetary system;
- It would at last offer a greater risk diversification for investors and central banks.

In sum, the government supported the internationalisation of the yen, and favoured domestic financial liberalisation as a means of providing attractive yen instruments to non-residents in one hand, and both the

liberalisation of euroyen transactions and the internationalisation of Tokyo on the other hand. However, in concrete terms, the yen has not emerged as an international currency, due to the prolonged economic stagnation / recession and to the lack of confidence. Tokyo as an international financial centre declined, and the government implemented a financial "big bang" in 1996 to restore financial markets and institutions competitiveness, with notably the elimination of barriers and a reform of the FX market.

In 1999, The government defined the internationalisation of the yen as "the expanding role of the yen in the international monetary system and the growing weight of the yen in current account transactions, capital account transactions, and foreign exchange reserves" (MoF (1999)). A Study Group on the Promotion of Yen Internationalisation was established in September 1999. It concluded that the status of the yen as an international currency had not changed much due to the economic situation, "the lack of confidence in the Japanese economy and the limited need to use yen" (Takagi (2011)). It also explained why Japanese companies were unable to use the yen as a billing currency: market bargaining power, international price setting practices (energy products quoted, traded and billed in USD, for example), strong preferences for the USD... The report still considered yen internationalisation as a long-term goal, but did not suggest any additional measures to internationalise the currency.

In 2003, the focus of the Japanese government shifted from internationalising the yen to internationalising the Japanese capital markets, with the idea that the latter could favour the former... Policymakers considered that the international status of the yen remained limited for at least three reasons:

1. Raw materials (for which US dollar invoicing is the norm) constituted a large share of Japan's imports,
2. The currencies of Asia tended to fluctuate more with the yen than with the USD, with virtually no cross trading,
3. There was little need for yen loans because most trade was not denominated in yen.

These are reasons about which Japan alone could do very little. And, in total, the internationalisation of the yen never progressed significantly:

- As regard invoicing: the yen's share of Japanese export (respectively imports) invoices has remained flat at around 40% (respectively 25%) since the mid-1990s (Japanese MOF), far from what is expected for an international currency and even far from usual practices;
- As regard world trade: the yen is underutilised versus the importance of Japan's trade. Japan represents roughly 5% of world trade, while the yen is used in transactions for less than 3%. In other words, even Japanese do not fully use the yen. Same conclusion for the Chinese Yuan, and to a lesser extent, for the Russian rubble, the Mexican peso,

the Singapore dollar, and the Hong Kong dollar… As regard the euro and the US dollar, it is the opposite: the currency's share in world payments in larger than the country's share in world trade, and both currencies can be considered as international currencies. As an illustration and to give an idea about the potential of the Chinese currency, the share of the RMB in world payments was still, a few years ago, 40 times lower than China's share in world trade;

- As regard central banks foreign reserves: the yen's share is down from 6.8% in 1995 to 5.4% in 2019H1.

Table 3: Internationalisation of the Japanese yen Lessons for China	
Lesson # 1	In the foreseeable future, the Japanese yen has a very little chance to increase its role as an international currency: the RMB can fill that empty seat in Asia
Lesson # 2	The liberalisation of capital markets represents a prerequisite for the internationalisation of the currency
Lesson # 3	Confidence in the economy is crucial
Lesson # 4	Domestic markets have to be attractive to foreign investors and foreign financial institutions in order to increase the need to use the currency
Lesson # 5	Bargaining power in trade invoicing currency helps to install the currency as an international one
Lesson # 6	Domestic financial centres must be developed as regional centres
Lesson # 7	The relative stability of the RMB in Asia is a prerequisite for this currency to be used and accepted as an international currency, and as a substitute for the US Dollar

2.3. China: a willingness to make the RMB an international currency

China decided to accelerate the internationalization of the RMB in the late 2000s, for 5 major (official and non-official) reasons:

- **To align the role of the currency with the size of China in the world economy;**
- **To allow Chinese corporates to reduce their dependence on the US dollar** and also to reduce FX cost and risk;
- **To reduce the accumulation of FX reserves;**
- **To develop a fixed-income market to attract foreign investors… and a way to finance reforms;**

- **To introduce additional and external pressures towards a necessary financial liberalisation**. In the same way, the entry of China into the WTO in 2001 kick-started the reforms of country's state-owned commercial banks.

The competition between the USD and the RMB has officially started.

2.4. Eurozone: an unfinished project ... so far

Germany is without any doubt the healthiest and most solid country among the major euro zone countries: fiscal surplus, primary surplus, debt under control (households, banks, corporates, public debt). Germany is also one of the rare countries in the world with India, Israel and Egypt where total debt has been reduced since the Great Financial Crisis of 2008. It is undoubtedly a major asset for Euro-denominated bonds. However, for a non-resident investor, buying the euro is not equivalent to buying German assets. The decline of the euro in 2010 was due to the difficulties of peripheral countries, the European debt crisis, the political mistakes of some countries ...

Germany is not exempt from criticism too: Germans invest relatively little in the rest of Europe, and the weakness of recycling savings from northern Europe to southern Europe is also one of the "dysfunctionalities" of the euro zone most often mentioned. The IMF regretted that Germany is not doing more to boost growth in the Eurozone. Because of its fiscal and primary surpluses, Germany no longer issues sovereign bonds, and the scarcity of bunds on the bond markets does not favour the euro as the international currency: the safest and highest rated papers are no longer made available to investors, unlike in the peripheral countries. Euro sovereign bonds offer carry, but the quality is lower ... a negative feature for central banks as regard safety / security / reserve status.

The IMF tends also to consider that the huge German trade surplus is an incentive for protectionism from trading partners. Germany is now suffering strongly from the economic slowdown and the indirect effects of US protectionist measures, with the risks of seeing these measures accentuated in the near future (mainly automobiles and agricultural products). Fiscal surpluses provide real room for manoeuvre, and the accumulation of current account surpluses is of little use. Even worse, low capital flows between European countries has forced some of them (peripheral countries mainly) to curb internal demand and eliminate trade deficit (Spain is the best example, France the biggest exception). As a consequence, the European trade surplus has increased significantly ... while the trade balance has deteriorated further in the US, in UK, Japan, and in Latin America. The dysfunction of the Eurozone has a part of responsibility in rising trade surplus in the Eurozone and in deteriorating trade conditions in the Rest of the World.

In sum, Germany has a surplus vs. a large number of European countries but the mobility of capital within EMU is limited, especially from the North to the South ... European countries could blame either the dysfunction of the Eurozone, or Germany, which **finances the US deficits and not the growth of Europe (deficient recycling of savings, segmentation of the Eurozone markets ...). In all, Europe is currently strengthening the supremacy of the dollar** ... as long as US deficits are not considered excessive.

III. International currencies: Where do we stand now?

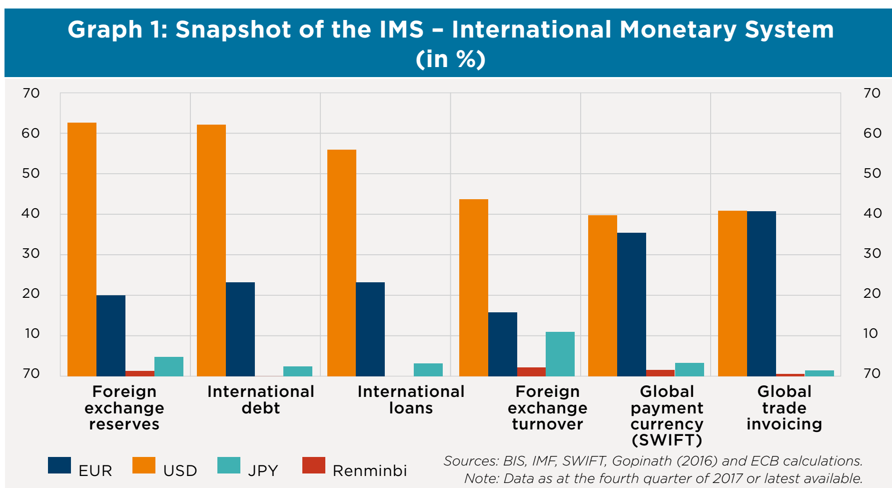
3.1. International currencies: a global overview

The euro and the USD are at present the only currencies having an international role, but the euro is lagging behind as regard some functions such as FX turnover, FX reserves. With the RMB emerging, one should enter into a multipolar currency system.

The graph below give some details:

- As regard global trade invoicing and global payment currency, the euro and the US Dollar represent around 40% each of the world transactions;
- The Euro has also to be considered as an international currency in terms of FX reserves, international debt, international loans and FX turnover, but the European currency is lagging behind the US currency;
- The Japanese yen has a (relatively small) role in FX markets, while the RMB is – so far- a marginal currency as regard all the functions of an international currency.

Graph 1: Snapshot of the IMS – International Monetary System (in %)



Sources: BIS, IMF, SWIFT, Gopinath (2016) and ECB calculations.
Note: Data as at the fourth quarter of 2017 or latest available.

3.2. The official use of currencies: FX reserves and the Great Financial Crisis

3.2.1. Central banks reserves in retrospect

After the 2008 GFC, Central banks' FX Reserve managers liquidated a huge part of their exposure to US agency securities and rebalanced their portfolios towards long-term Treasuries and, to a lesser extent, equities. The share of equities in long-term US assets held by foreign official institutions rose from 10% in 2007 to 18% in 2015. In the meantime, following the Great Financial crisis and the Eurozone crisis, the weight of the euro as a reserve currency fell dramatically: from its peak of 28% reached in Q3 2009, it fell to 19% at the end of 2015, its lowest level since 2000 (around 20.5% at present). The dollar remains by far the major currency, with 61.5% of the allocated reserves in H1 2019, while its share was 72% in 1999. This is a move towards a "multipolar" monetary system, with the Chinese yuan (from 1% in 2012 to 2% in 2019), the Japanese yen (from 3.5% in 2012 to 5.25% in 2019), the Australian dollar and the Canadian dollar increasing their share in global FX reserves. Euro, CHF and GBP even less have not benefited from this tendency.

The role of the USD has declined in the past decade for some reasons:

- The emergence of the euro as a reserve currency;
- Low interest rates in the US;
- Higher debt in the US;
- The decline of the US in the world economy;
- FX reserve diversification, especially in Asia;
- Political factors: to name a few (and big) central banks, Russia, Japan and China have reduced the portion of USD in FX reserves.

The role of the EUR has also declined since the GFC (Great Financial Crisis) due to diversification of FX reserves, and because of some additional and specific reasons:

- The 2011-2012 debt crisis;
- The recession that followed he GFC and the debt crisis;
- The doubt as regard the survival of the euro (the loss in predictability);
- The deterioration in the credit quality of European bonds (less German Bunds, more peripheral countries' bonds);
- The weakness and the instability of the euro.

The share of the EUR in FX reserves has therefore significantly declined between 2009 (the highest) and the end of 2018, from 27.25% to 20.70%. Since 2012, the Eurozone has had a large savings surplus (the current account surplus is over 3.5% for the zone, and close to 8% in Germany

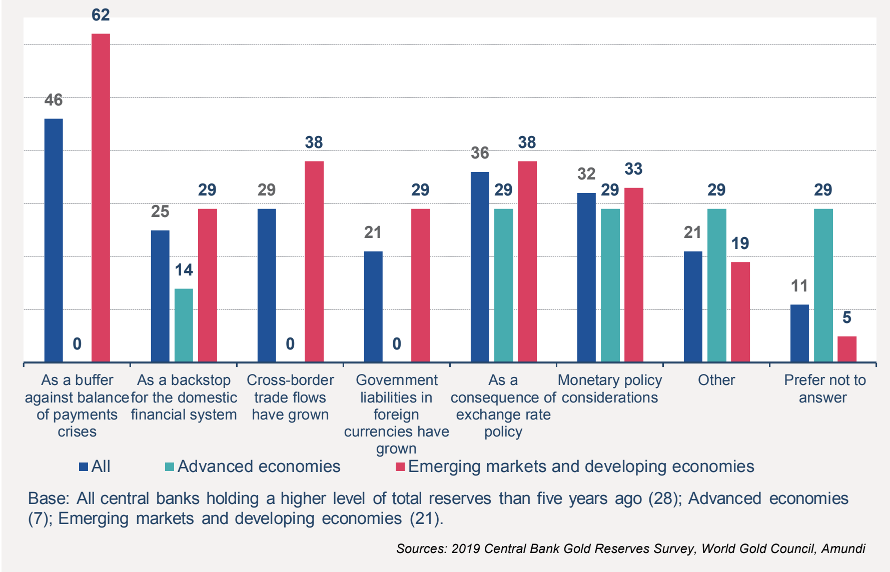
and the Netherlands), a situation that is diametrically opposed to that of the United States. This leads to the disappearance of the net external debt. It is therefore difficult to use the euro as an international reserve currency. Since 2015, non-residents have also reduced their holdings of Eurozone bonds. **We can say that the United States chose the external debt and the external deficit (low saving rate and high consumption level), while the euro zone has made the choice (especially since 2012) of an external surplus and the accumulation of foreign assets**.

Table 4: The EUR, RMB, JPY, GBP CHF and USD in world's FX reserves since 2002 (in %)

	USD	EUR	RMB	JPY	GBP	CHF
2002	68.52	21.79		4.95	2.83	0.34
2003	66.18	24.74		4.35	2.66	0.23
2004	66.72	23.80		4.28	3.09	0.20
2005	65.89	24.37		4.12	3.73	0.15
2006	65.78	24.54		3.48	4.32	0.16
2007	64.43	25.58		3.08	4.75	0.16
2008	63.37	26.16		3.48	4.66	0.15
2009	62.88	27.26		2.96	4.20	0.12
2010	61.92	26.54		3.33	4.11	0.11
2011	61.37	25.87		3.66	3.96	0.15
2012	61.49	24.07		4.09	4.04	0.21
2013	61.75	23.81		3.84	3.90	0.26
2014	63.96	22.25		3.59	3.75	0.24
2015	65.63	19.71		3.66	4.43	0.27
2016	65.36	19.13	1.07	3.96	4.34	0.17
2017	62.72	20.16	1.23	4.90	4.53	0.18
2018	61.74	20.67	1.89	5.20	4.42	0.14
2019H1	61.63	20.35	1.97	5.41	4.43	0.14

FX reserves rose in the past years in some central banks. According to the 2019 Central Banks Gold reserves survey, reasons behind are different depending on the group of countries (where FX reserves are higher). For emerging markets and developing economies, the main reason for higher total reserves is to buffer against balance of payments crises. For advanced economies, exchange rate and monetary policy considerations are the main reasons (see graph below).

Graph 2: The main reason(s) explaining why each institution is holding a higher level of total reserves (foreign exchange and gold) compared to five years ago



Base: All central banks holding a higher level of total reserves than five years ago (28); Advanced economies (7); Emerging markets and developing economies (21).

Sources: 2019 Central Bank Gold Reserves Survey, World Gold Council, Amundi

3.2.2. Central banks reserves in perspective

For the coming 5 years, central banks expect a decline in the share of the USD, a stabilisation of the EUR, and an increase in RMB and gold share.

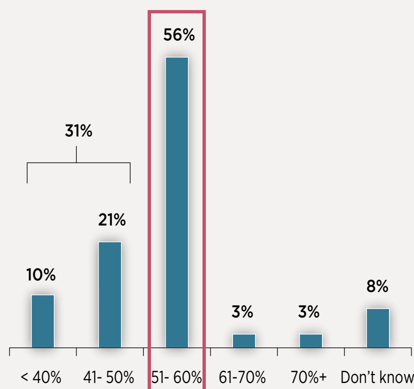
- According to the 2019 Central Bank Gold Reserves (CBGR) survey, while the majority of central banks expect the proportion of total reserves denominated in **US dollar** to remain at a similar level (between 51-60%) in the next five years, nearly a third anticipate a decline (36% of advanced economies and 29% of emerging markets and developing economies).
- Half of central banks expect the proportion of total reserves denominated in **euros** to remain at a similar level (between 11-20% for the respondents). A quarter expect this to rise, while 15% expect it to fall. 75% of emerging markets and developing economies expect the proportion of total reserves denominated in euros to either stay at the same level or fall. In comparison, 45% of those in advanced economies expect this to happen.
- Three quarters of central banks forecast an increase in the proportion of total reserves denominated in **renminbi** (currently at 2%) over the next 5 years (82% of advanced economies and 75% of emerging markets and developing economies).

- Two thirds of central banks either expect the proportion of total reserves denominated in **gold** to remain stable (10-15%) or increase over the next five years. There was no material difference between the advanced economies and emerging market and developing economies on this question.

Graphs 3, 4, 5 and 6: FX reserves composition and central banks' expectations (in 5 years)

(39 respondents: 11 advanced countries, 28 emerging and developing countries)

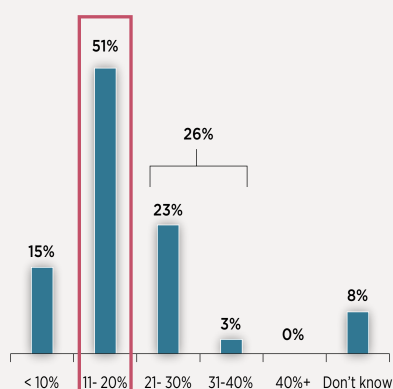
Graph 4: US dollars in five years (Current share: around 60%)



Base: All central banks (39); Advanced economies (11);
Emerging markets and developing economies (28).

Source: World Gold Council, Amundi

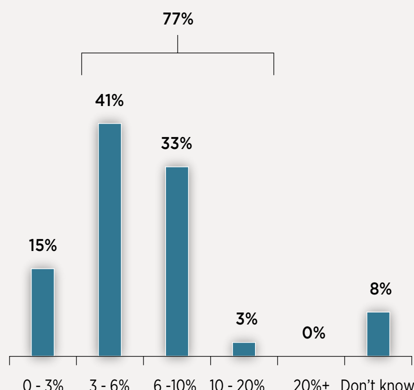
Graph 5: Euros in five years (Current share: around 20%)



Base: All central banks (39); Advanced economies (11);
Emerging markets and developing economies (28).

Source: World Gold Council, Amundi

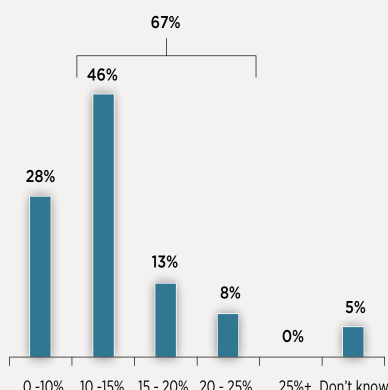
Graph 6: Renminbi in five years (Current share: around 2%)



Base: All central banks (39); Advanced economies (11);
Emerging markets and developing economies (28).

Source: World Gold Council, Amundi

Graph 7: Gold in five years (Current share: around 12%)



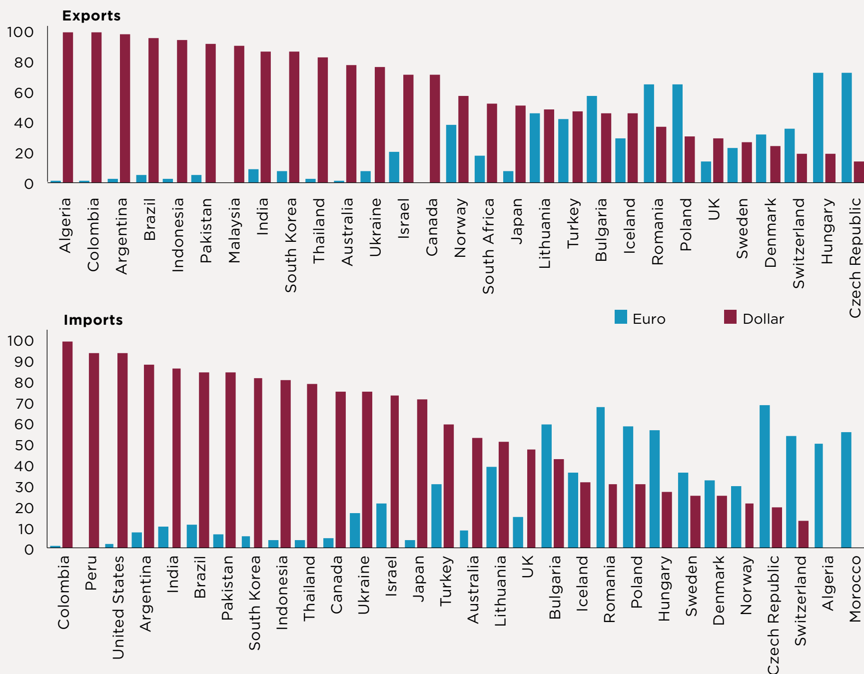
Base: All central banks (39); Advanced economies (11);
Emerging markets and developing economies (28).

Source: World Gold Council, Amundi

3.3. The private use of currencies

As an invoicing currency, the euro competes with the USD (40% market share each), but the USD remains the top currency. A recent study of Bruegel Institute shows the **regional role of the euro**. It is mainly used for exports/imports of non-euro area European countries and countries in the European neighbourhood. At the opposite, **the USD has a true international role**: in East Asia and Latin America, trade is overwhelmingly invoiced in dollars. Even in Europe, the dollar's share is quite high, partially due to its role in denominating commodities. In total, the US dollar is the only international currency in the world. The share of US dollar-denominated world trade is more than three times higher than the US' share of world trade.

Graph 7: The use of EUR and USD for export / import invoicing



Source: Gopinath (2015). Note: Average share of exports from/imports into that country in that currency, averaged across all years for which data is available (starting 1999).

Note: Average share of exports from imports into that country in that currency, averaged across all years for which data is available (starting 1999)

As a vehicle currency, the USD is the most important currency, by far ... and no currency is able so far to gain ground. In 1998, the USD was part of 87% of

world trade, and this percentage is stable, at 88.3% in 2019, according to the last Triennial Central Bank Surveys carried out by the BIS in September. The euro is still ranked second (39% in 2010, and 32.3% in 2019 (vs. 31.4% in 2016) and the Japanese Yen third (16.8% vs. 21.8% in 2016) but their role is declining due to the growing role of other currencies, of which the Chinese yuan (4.3% vs. 4.0% in 2016 vs. 0.1% in 2004) …). The EUR/USD currency pair represent at present 24% of the FX market turnover, while the USD/CNY is at 4.1% (similar to the USD/CAD (4.4%), slightly higher than the USD/CHF (3.5%), twice the share of EUR/GBP (9.6%) and three times the share of EUR/JPY (1.7%)).

IV. How to reinforce the international role of the Euro and RMB?

4.1. How to reinforce the international role of the euro?

To reinforce the international role of the Euro, Europe has to consolidate and improve the euro-area institutional set-up. Some examples:

- The completion of the **European Banking union**,
- Progress on **capital markets union**,
- Better **credit quality of 'peripheral'** sovereign bonds,
- The issuance of a **common 'federal' bond**, with a role similar to that played by Treasuries in the US, would significantly increase the international role of the euro.
- Progress in the **set-up of euro-area economic policy**, in its fiscal and structural components,
- **A more united, and thus more effective, external and defence policy** would favour greater international use of the euro.
- **Speaking with one voice** more regularly on critical issues would be a "plus" for the euro, no doubt. European initiatives to foster cooperation on security and defence, to speak with one voice on international affairs, and, in short, to further assert global leadership, might also help promote the euro's global outreach.

4.2. How to reinforce the international role of the renminbi?

If China wants the RMB to become an international currency, some prerequisites are to be met:

- Capital market liberalisation,
- Capital account openness,
- Abandonment of capital controls,
- Full convertibility of the currency,
- … etc.

As it will be pointed out below, China is still far from completing these prerequisites.

4.2.1. Financial liberalisation in China: where do we stand now?

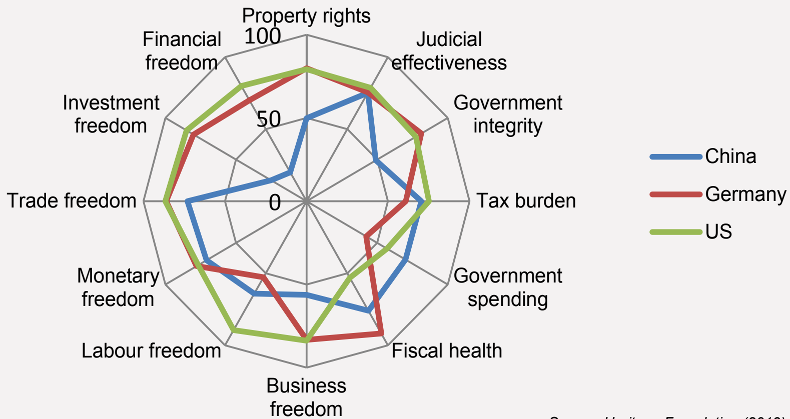
In the way to become an international currency, financial liberalisation is critical, of course, but the way to go for China to be considered as a market economy is even much larger. As the "economic freedom score" (published by the Heritage Foundation) points out, China is significantly lagging behind Europe and the US. This index covers 180 countries, and analyses twelve aspects of economic freedom, grouped into four broad categories:

- **Rule of law:** property rights, judicial effectiveness, and government integrity;
- **Government size:** tax burden, government spending, and fiscal health;
- **Regulatory efficiency**: business freedom, labour freedom, and monetary freedom;
- **Market openness:** trade freedom, investment freedom, and financial freedom.

Asia is still the continent where disparities are at the highest, and **China, ranked # 100 worldwide and #20 in Asia-Pacific (over 43 countries), is amongst the "mostly unfree countries" group**. Its overall score is below the regional and world averages. As the report mentions, "*Non-transparent state-owned enterprises dominate the financial sector and many basic industries. The official ideology of "Socialism with Chinese Characteristics" has chilled liberalization, heightened reliance on mercantilism, raised bureaucratic hurdles to trade and investment, weakened the rule of law, and strengthened resistance from vested interests that impede more dynamic economic development*". The US ("mostly free") is ranked # 12. Europe has also good rankings: Ireland is ranked #6 and is part of the very small group of 6 countries considered as totally free (Hong Kong, Singapore, New Zealand, Switzerland, Australia and Ireland). UK (# 7), Germany (# 24), Finland (# 20), Austria (# 31), Netherlands (# 13), Luxembourg (# 17) (all "mostly free"), and France ("moderately free" - # 71) have all much better scores than China. Among the BRICS, Brazil is ranked # 150, Russia # 98, India # 129 and South Africa # 102, and all of them are considered "mostly unfree".

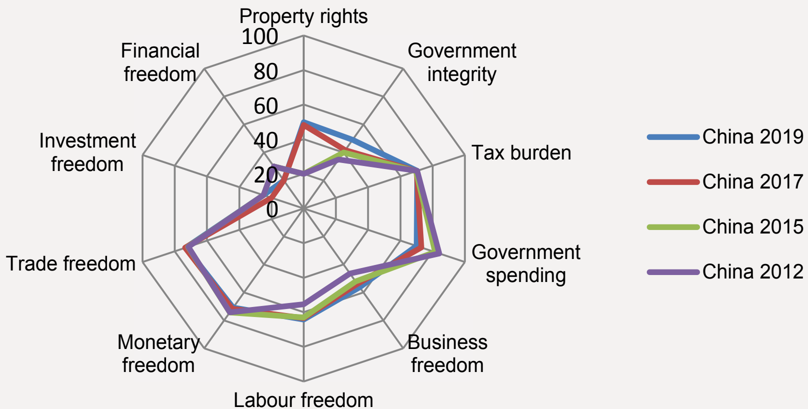
None of the BRICS is considered to be in the top 15 the countries having made huge strides in economic freedom in the past 25 years. **The score of China stagnates for the past 2 years and has increased by only 10% in 20 years.** The major concerns are still financial freedom and investment freedom.

Graph 8: Index of economic freedom 2019: China, US and Germany



Source: Heritage Foundation (2019), Amundi

Graph 9: Index of economic freedom - China from 2012 - 2019



Source: Heritage Foundation (2019), Amundi

The graphs above exhibit the lack of improvement in some components and the deterioration in monetary, investment and financial freedom components (China had implemented capital control measures at the turn of 2018, with the US tariffs potentially damaging the RMB and accelerating capital outflows).

These graphs also point all the magnitude of the efforts to be further made in China.

Note that the US called China its "strategic rival" in its National Security Strategy report in December 2017. The target is to promote free, fair and reciprocal economic relationships. As the report said, *"for decades, the United States has allowed unfair trading practices to grow. Other countries have used dumping, discriminatory non-tariff barriers, forced technology transfers, non-economic capacity, industrial subsidies, and other support from governments and state-owned enterprises to gain economic advantages. Today we must meet the challenge. We will address persistent trade imbalances, break down trade barriers, and provide Americans new opportunities to increase their exports". (...). "The United States distinguishes between economic competition with countries that follow fair and free market principles and competition with those that act with little regard for those principles*". A good introduction to the current trade disputes of D. Trump.

The US also released the 'Status of Non-Market Economy' report on China questioning China's economic system. Several reasons were mentioned (J. Ha (2018)):

- *"The government controls fundamental economic factors like land and other resources either directly or indirectly, and state-owned enterprises have control over many economic resources through administrative monopoly.*
- *Pricing mechanism is still limited in many sectors.*
- *Effectiveness of protection on private property rights is still insufficient.*
- *The government is taking various industrial policies as measures to realize diversified goals such as technology upgrade*".

Even if some countries have "kindly" accepted to qualify China as market economy, additional steps have to be done to support the RMB as an international currency. China has the political will to do it. The key question here is about the speed of the financial liberalisation: What does history tell us?

4.2.2. Gradual steps or big bang? What does history tell us about financial liberalisation?

It is worth comparing the current financial liberalisation in China with other experiences from the past. Throughout history, lots of countries have decided to liberalise the financial markets, open the capital account and abandon capital controls, and experiences are mixed overall, for at least five reasons:

- The liberalisation occurred in different periods of time, some of which were highly favourable, while others were hectic and resulted in financial crises;
- This decision has been implemented in advanced and developing countries at very different stages of development;

- When countries are different in size and importance, the impacts are naturally different. Financial vulnerability and political instability might be additional criteria making the difference between two experiences;
- There is no single way to adopt financial liberalisation: in history, some countries had promoted a big bang approach, while other countries preferred very gradual approaches;
- In some cases, financial liberalisation was "simply" a way back to a normal situation, a financial crisis having forced countries to adopt capital controls to curb the negative impacts (on the FX regime, on capital flows…). In the case of China, it is a major step to a brand new situation, to uncharted territories.

It seems difficult to compare China today with past experiences in Asia, Eastern Europe, continental European countries, Scandinavian countries, etc. What are the best proxies? As Chen – Jonung – Unteroberdoerster (2009) mention, how can we compare small, advanced market economies and welfare states, with China, a big and far less developed country, "*without a modern social security system, lacking a firm legal infrastructure, with large stateowned banks, and a dormant financial system: in short, a country in transition from a socialist mode to a market economy?*". The Scandinavian countries – Denmark, Finland, Norway and Sweden – "*may not be the first case of financial liberalisation and financial crisis that spring to the minds of policy-makers when they are searching for lessons that are relevant for China at the present time*". However, as these authors mention, there are several reasons to consider the Scandinavian experience to be useful, simply because China today and the Nordic countries before liberalisation, i.e. in the mid-80s, share a critical mass of common features:

- A bank-dominated financial system,
- Strong credit controls,
- Exchange (capital account) controls,
- Lack of risk management experience,
- Lack of financial knowledge,
- Open on the current account side.

In sum, similarities are much higher than generally thought. So, what are the lessons for China? Among the different lessons Chen – Jonung – Unteroberdoerster developed, we will examine the five most important ones (see table # 5 for a recap).

Lesson # 1: Financial liberalisation does not necessarily pave the way toward financial crises, except when policy makers and central banks misunderstand the effective operation of newly unregulated financial markets. With capital account openness and the end of capital

controls, a country always enters a riskier world, and usual behaviours have to be avoided. In Scandinavia, policy-makers, central bankers and financial regulators underestimated the risks that a combination of deregulation and accommodative monetary and fiscal policies could represent. Credit growth and rising consumption were excessive, and no major counteracting stabilisation policy measures were taken in time. At that time, Scandinavia failed to identify the boom-bust cycle: for many years or even decades, policy-makers and other players had experienced a financially closed and strongly regulated economy, with limited financial risks. As a consequence, they strongly misunderstood the effective operation of unregulated financial markets. In other words, "*understanding the linkages within the financial system and to the rest of the economy and the workings of open financial markets is central to making financial liberalisation successful*". History recalls that particular attention has to be paid to the growth of credit aggregates, as credit is the main driver of boom-bust cycles. The risk is particularly high nowadays because at the time of its financial liberalisation, market participants will have access to instruments and techniques that did not exist in the Nordics in the 1980s and that facilitate capital flows, credit, etc.

Lesson # 2: Reforms need to be properly sequenced to minimise pro-cyclical effects. It is very common to liberalise capital inflows before liberalising capital outflows. China is in the same mood. The danger is simple: to generate at first a lending boom, and then to be forced to reverse the economic policy to protect the FX regime (usually a peg or a closely managed floating exchange regime) or to curb the damages of a financial crisis when financial markets are externally deregulated. In Scandinavia, once the financial difficulties appeared, the exchange rate regime had to be protected with high interest rates, thus contributing to the economic downturn. In several cases, the peg had to be abandoned. This happened in September 1992 in Finland, in November 1992 in Sweden and in December 1992 in Norway. No doubt that floating exchange rate regimes had to be adopted earlier. To cut a long story short, "*China should strengthen its financial system before it is exposed to international competitive forces*".

Lesson # 3: The financial supervisory system has to be reformed prior to or (at the latest) simultaneously with financial liberalisation. In Scandinavia, prior to financial deregulation, no doubt financial supervision was appropriate, despite the fact that there were no weak banks, no corruption, no dubious links between banks and companies, and no subsidies to banks. Nevertheless, when the financial crisis surfaced in the early 1990s, the entire banking system collapsed in most of the countries. In reality, supervision became less and less effective as financial liberalisation gained ground. The consequences were very severe,

especially in Sweden and Finland, where the downfall in output and production in the early 1990s were larger than during the previous crises, matching the depression of the 1930s.

Lesson # 4: A "big bang" approach to financial liberalisation as applied by the Nordics (apart from Denmark) should be avoided in China, where a cautious approach should be favoured by liberalising in small, but substantive steps. To stay flexible ahead of potential difficulties is essential in general, and especially in the case of China due to its role in US debt financing. As a consequence, any financial instability coming from financial reforms in China might have an impact on world financial markets. Indeed, according to US Statistics, China accounts for about 1/4 of US Treasury bills and bonds held by foreigners. The build-up of such a high level of FX reserves is mainly due to 1) large and rising current account surpluses, and 2) long-term capital inflows (such as foreign direct investment) attracted by China's rapidly growing economy. Another reason for a flexible and gradual approach comes from the fact that the Scandinavian economies were market-based systems when they decided to liberalise their financial markets, which is not the case for China, still at present an economy in transition: as a consequence, the process is certainly more complicated and riskier, and it pleads for gradualism. Denmark adopted a more gradual process, which "*allows time to learn from mistakes and provide the opportunity to back-track if signs of major tensions develop*" and its financial liberalisation has been implemented without creating a sharp boom-bust pattern.

Lesson # 5: In the long-run, financial liberalisation tended to be beneficial for the countries that decided to move this way. It should be the case for China, and as Chen – Jonung – Unteroberdoerster (2009) pointed out, "*a properly functioning financial system is a key determinant of growth and transformation. Maintaining the present status quo of financial underdevelopment brings high costs and the risk of abrupt – and thus very damaging - changes in the future*". Note that even if in some cases countries have implemented temporary capital controls in period of crises, none of them has reversed the financial liberalisation trend. And none of the three Nordic countries (Sweden, Norway and Finland) that suffered the costs of financial crisis of the 1990s has made the decision to go back to financial autarchy and to drastically limit capital flows, or otherwise to turn the clock back. This suggests that the long-term benefits of financial integration outweigh its short-term costs.

To conclude, it is evident that financial liberalisation is always a risky journey, and that the gradualism of the Chinese policy does not fully guarantee the absence of turbulence. However, the short-run costs and risks have to be compared with the long-run benefits.

Table 5: Financial liberalisation in Scandinavia Lessons for China	
Lesson # 1	Financial liberalisation does not necessarily pave the way toward financial crises, except when policy makers and central banks misunderstand the effective operation of newly unregulated financial markets
Lesson # 2	Reforms need to be properly sequenced to minimise pro-cyclical effects
Lesson # 3	The financial supervisory system has to be reformed prior to or (at the latest) simultaneously with financial liberalization
Lesson # 4	A "big bang" approach to financial liberalisation as applied by the Nordics (apart from Denmark) should be avoided in China, where a cautious approach should be favoured by liberalising in small, but substantive steps
Lesson # 5	In the long-run, financial liberalisation tended to be beneficial for the countries that decided to move gradually, step by step

4. 3. Will the international role of the dollar decline?

The drying up of the accumulation of FX reserves, the accumulation of excessive debts and deficits in the US (or, the other extreme, the end of debts and deficits in the US, a non-credible scenario at this stage), and the US foreign policy represent the three major drivers for the USD to decline as an international currency.

4.3.1. 1st key factor: Since 2014, FX reserves ceased to increase

The reason is simple: many central banks do their best to avoid sharp appreciation of their currencies (oil-exporting countries, EMG countries, China, Japan). A **major change** comparing with the 2000-2014 period, when FX reserves surged; it represented a massive "plus" for the USD, taking into account the importance of the USD in reserves. **Mechanically, a large part of this increase was invested in USD (high liquidity, higher returns, safe haven assets ...), facilitating the US deficits**. **With the decline in FX reserves, the ongoing diversification of FX reserves (emergence of new currencies in FX reserves, lure of gold in times of geopolitical uncertainty ...), low US rates, the high level of US debt, and the decline of the share of the US economy in the world, the share of USD in FX reserves could only decline**.

4.3.2. 2nd key factor: US deficits continue to rise significantly

US fiscal deficit and trade deficit deteriorated in the recent years, particularly due to the tax and fiscal boost, the slowdown of the US economy and the strength of domestic consumption. **The question deals with the capacity of the US to finance the twin deficit**: is the risk-free asset role of the US public debt (and the global demand for US treasuries) sufficient? The US public debt (US-Treasuries) is the largest global risk-free asset, thanks to the liquidity of its market and the ability of the US state to remain solvent. During crises and recessions, investors rush to this asset class, which lowers US equilibrium interest rates and leads to an appreciation of the US dollar. Here lies a paradox (not sustainable): US problems give incentive to buy USD assets … **However, in history, it is easy to find periods when this risk-free asset role of the US debt is weaker.**

Sometimes, it is **insufficient to finance the US public deficit**, and it normally leads to a rise in US bond yields. This occurred in 1983-84, in 1990-91, in 2013-2014, and in 2017-2018.

Sometimes, it is **insufficient to finance the US external deficit**, and it normally leads to a depreciation of the dollar, as in 1985-87, and in 2004-2008.

In theory, in such cases, there could be either a depreciation of the dollar, or an increase in the risk premium on US bonds and therefore a rise in long-term rates and an increase in spreads with German bonds for example, or a fall in growth – and even a recession, or a combination of all three possibilities.

At present, fiscal deficit and trade deficit (twin deficits) represent a risk … which is not (not yet?) priced in valuations. Such a situation would be favourable to additional diversification in FX reserves and further usage of alternative currencies.

4.3.3. 3rd key factor: The United States can - directly or indirectly - wither the international role of the dollar

US foreign policy might be determinant for the accumulation / decumulation of USD in FX reserves. D. Trump external policy might have massive consequences. A recent study (Eichengreen et al. (2018)) shows that the share of the US dollar in the foreign reserve holdings depends on the US security umbrella. The authors assess the role of economic and security considerations in the currency composition of international reserves. They contrast what they call the "*Mercury hypothesis*" (currency choice being governed by pecuniary factors familiar to the literature, such as economic size and credibility of major reserve currency issuers), against the "*Mars hypothesis*" that this depends on geopolitical factors. Using data on foreign reserves of 19 countries before World War I, for which the currency

composition of reserves is known and security alliances proliferated, they find that "*military alliances boost the share of a currency in the partner's foreign reserve holdings by about 30 percentage points. These findings speak to the implications of possible U.S. disengagement from global geopolitical affairs*" (i.e. a reduction in USD in FX reserves and/or a rise in bond yields as a way to still attract FX reserve flows into US assets). Said in a different way, should the U.S. withdraw from the world, keeping FX reserve composition unchanged would imply a rise in US Bond yields by as much as 80 basis points (this represents the advantage for the US (a negative risk premium) of protecting partners whose central banks allocate FX reserves into the USD assets). In such a scenario, additional diversification of FX reserves would certainly be inevitable. Being the master of NATO or being outside NATO (and other international organisations and multilateral agreements) might change the game for the US. This would have clear implications for policymakers, in the US, and in Europe.

Conclusion

The USD is by far the most important international currency, although declining in recent years, especially as regard central banks' FX reserves. New currencies have emerged (of which the RMB), central banks diversify their portfolios (especially in Asia), while some "old" currencies gain ground (the JPY and gold, to some extent). Moreover, even if two contenders exist at present (the euro and the RMB), the USD is the only currency to be considered as an international currency as regard all its characteristics: reserve currency, invoicing currency, vehicle currency, reference currency ... It is the only one to be worldwide accepted, and the US, through structural (recurrent) fiscal and current account deficits (and through the balance sheet of the Fed), never stopped feeding the global liquidity market (a major difference with Germany, for example). However, **the international status of the USD might diminish further in the long term** depending on 6 conditions:

1. The pursuit of FX reserves diversification by Asian central banks into alternative currencies and into gold;
2. The continuation of the internationalization of the RMB as a contender of the USD, alongside with the Euro;
3. The capacity of the Eurozone to improve the institutional and economic set-ups:
4. The political and economic will of the Eurozone (especially Germany);
5. The difficulty of the US to attract international savings (as they do since the 1970s) to finance structural twin deficits;
6. The foreign policy of the US administration;

To reinforce the international role of the Euro, Europe has to consolidate and improve the euro-area institutional set-up. Some examples: the completion of the **European Banking union**, progress on **capital markets union**, better **credit quality of "peripheral"** sovereign bonds. The issuance of a **common "federal" bond**, with a role similar to that played by Treasuries in the US, would significantly increase the international role of the euro. Progress in the **set-up of euro-area economic policy**, in its fiscal and structural components, and **a more united, and thus more effective, external and defence policy** would favour greater international use of the euro. **Speaking one voice** more regularly on critical issues would be a "plus" for the euro, no doubt.

If China wants the yuan to become an international currency, some prerequisites are to be met: capital market liberalisation, capital account openness, capital controls abandoned, full convertibility of the currency ... However, the emergence of a true international currency is a very long process. Moreover, in history, financial instability seems to be the only factor that can change quickly the sharing of the world of international currencies.

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References

Balz B. (2018) "*The role of the renminbi in international payments*", Keynote at the 5th European-Chinese Banking Day as part of the Euro Finance Week, Frankfurt am Main, 14 November 2018.

Chen H., L. Jonung and O. Unteroberdoerster (2009) "*Lessons for China from Financial Liberalisation in Scandinavia*", Economic Papers 383, European Commission, Economic and Financial Affairs, August.

Coeuré B. (2019) "*The euro's global role in a changing world: a monetary policy perspective*", Council on Foreign relations, New York, February 15.

Cohen B.J. (1971) "*The Future of Sterling as an International Currency*", Macmillan, London.

Dadush U. and V. Eidelman (Editors) (2011) "*Currency Wars*", Carnegie Endowment for International Peace.

Drut B., Ph. Ithurbide, M. Ji and E. Tazé-Bernard (2016) "*The emergence of the renminbi as an international currency: where do we stand now?*", Amundi Discussion Papers Series, DP-18-2016, September.

Efstathiou K. and F. Papadia (2018) "*The euro as an international currency*", Policy Contribution Issue n°25, Bruegel, December.

Eichengreen B. (2013) "*Currency war or international policy coordination?*", January.

Eichengreen B., Mehl, A. and Chiţu, L. (2017) "*How Global Currencies Work: Past, Present and Future*", Princeton University Press.

Eichengreen B., A. Mehl and L. Chiţu (2019) "*Mars or Mercury? The geopolitics of international currency choice*", Economic Policy, forthcoming.

Efstathiou K. and F. Papadia (2018) "*The euro as an international currency*", Policy Contribution Issue n°25, Bruegel, December.

European Central Bank (2018) "*The international role of the euro*" – Interim report.

European Commission (2018a) "*Communication from the Commission to the European Parliament, the European Council (Euro Summit), the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions – Towards a stronger international role of the euro*", COM(2018) 796/4.

European Commission (2018b) "*Commission Recommendation of 5.12.2018 on the international role of the euro in the field of energy*", C(2018) 8111/final.

Frankel J. (1984) "*The yen/dollar agreement: liberalizing Japanese capital markets*", Policy Analyses in International Economics, no 9, Institute for International Economics.

Gopinath G. (2015) "*The International Price System*", NBER Working Paper Series, No. 21646, National Bureau of Economic Research.

Ha J. (2018) "*China-US Trade Conflict: Causes and Impact*", China Finance 40 Forum, CF40-PIIE Joint Report, June.

Huang Yiping (2018) "*The key to RMB internationalization is to solve the exchange rate issue*", China Finance 40, September.

Ithurbide Ph. (2019) "*Who Will Lead the World Economy? US vs EU vs China - USD vs. EUR vs RMB*", Amundi Discussion Papers Series, DP-38-2019, April, 62 pages.

Kenen P. (1983) "*The Role of the Dollar as an International Currency*", Occasional Papers No. 13, Group of Thirty, New York

Kenen P. B. (2011) "*Currency internationalisation: an overview*", published in "*Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific*", volume 61, pages 9-18, Bank for International Settlements.

Miller T., A. B. Kim and J.M. Roberts (2019) "*2019 Index of Economic Freedom*", The Heritage Foundation, Washington.

Nye J. (2015) "*Is the American Century Over?*" Global Futures, Polity.

Richards J. (2012) "*Currency wars: the making of the next global crisis*", Portfolio / Penguin.

Song H. (2007) "*La guerre des monnaies – la Chine et le nouvel ordre mondial*", Editeur : Le Retour aux Sources, Coll. Economie Politique.

Takagi S. (2011) "*Internationalisation of the yen, 1984-2003: unfinished agenda or mission impossible?*", in "*Currency internationalisation: lessons from the global financial crisis and prospects for the future in Asia and the Pacific*", Bank for International Settlements, BIS Paper # 61, December.

The International Economy (2019) "*Is a global currency war still possible*", A symposium of views, Summer, pp. 16-34.

World Gold Council (2019) "*Central Bank Gold Reserves Survey*".

Yi-Lin Forrest J., Y. Ying and Z Gong (2018) "*Currency wars: offense and defence through systemic thinking*", Springer Intl Publishing AG.

Yin Yong (2018) "*Promote the Internationalisation of RMB and Better Serve the New Pattern of All-Round Opening Up*", China Finance 40, July.

Yu Yongding (2018) "*China Should Not Underestimate the Long-term and Complex Nature of Renminbi Internationalization*", China Finance 40, August.

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