

## Mounting global public debt on delicate assets-liabilities balances

The *World Economic Situation and Prospects (WESP) 2021*<sup>1</sup> addresses the issue of increasing levels of fiscal deficits and public debt, among other topics. To build back better through the SDGs, fiscal policy needs to play an active role. The pandemic's remaining uncertainties require additional fiscal measures beyond the stimulus measures implemented last year. Such actions are required to prevent the world economy from another implosion of aggregate demand. Governments still need to combat the COVID-19 pandemic and act to alleviate the pandemic's socioeconomic impact—rising unemployment, poverty, and inequality. Total public debt globally is projected to grow further this year, well beyond the record level of 2020. The *WESP 2021* warns that the current situation exacerbates the risks of debt distress if additional fiscal expenditures do not lead to equitable, inclusive and sustainable economic growth.

Following up on the *WESP 2021*, this Monthly Briefing aims to provide an additional picture of the issue of rising public debt, particularly in developed countries, based on the latest financial accounts available for the euro area, Japan and the United States for the third quarter of 2020. After a brief review of the concept of financial accounts and the sectoral patterns of assets and liabilities distribution in the euro area, Japan, and the United States, it looks into the impact of soaring public debt issues and the monetary easing on the sectoral balance sheets. It shows that the soaring public debt issues were largely absorbed by the countering surge of deposits by non-financial businesses and households through financial intermediaries. However, the jump in deposits in 2020 was a temporary phenomenon during the current crisis, and the deposits growth is likely to stagnate in 2021. Demand for public debt in developed countries is likely to wane if the gap in growth between the outstanding public debt and the deposits widens.

### Financial accounts and patterns of assets-liabilities distribution

Financial accounts, also known as flow-of-funds accounts, are part of the System of National Accounts (SNA) 2008.<sup>2</sup> Financial accounts record the acquisition of financial and non-financial assets and the incurrence of liabilities of institutional sectors: financial corporations, non-financial corporations, general government,

#### KEY MESSAGES

- » In the euro area, Japan and the United States, financial sectors, including central banks, purchased most of the new public debt during the past year.
- » While these purchases expanded the financial sector's assets side of the balance sheets, the liabilities side grew with increased deposits mostly from the non-financial business and households sectors. The changes in the liabilities side of the balance sheets suggest that non-financial businesses and households indirectly financed the new public debt issues.
- » The jump in deposits in 2020 can largely be attributed to the temporarily increased savings of the non-financial businesses and households amid limited spending and investment opportunities and to strong liquidity preferences and high risk-aversion during the crisis.
- » The demand for public debt may quickly wane should consumer confidence improve, non-financial business sector's liquidity preference reverse and spending and investment return to their long-term trends.
- » The current situation presents a challenge for policymakers, presenting difficult trade-offs between further fiscal stimulus and cost of debt financing, which calls for further international coordination.

households, non-profit institutions serving households (NPISHs), and the “rest of the world”.<sup>3</sup> With the balance sheets derived through financial accounts, a country can estimate its total net wealth: the total of non-financial assets such as land, buildings, equipment, and patent rights. Financial assets are not part of the total net wealth. A financial asset “represents agreements between parties regarding future payments, such that a financial asset of one party is always matched with an offsetting financial liability of another party”.<sup>4</sup> By summing over all institutional sectors, the total financial assets in principle matches the total liabilities.

<sup>1</sup> United Nations (2021), *World Economic Situation and Prospects 2021*. <http://www.bit.ly/wespreport>.

<sup>2</sup> European Central Bank and United Nations (2014), *Financial Production, Flows and Stocks in the System of National Accounts*. ST/ESA/STAT/SER.F/113. <https://www.un.org/development/desa/capacity-development/tools/tool/handbook-of-national-accounting-financial-production-flows-and-stocks-in-the-system-of-national-accounts/>.

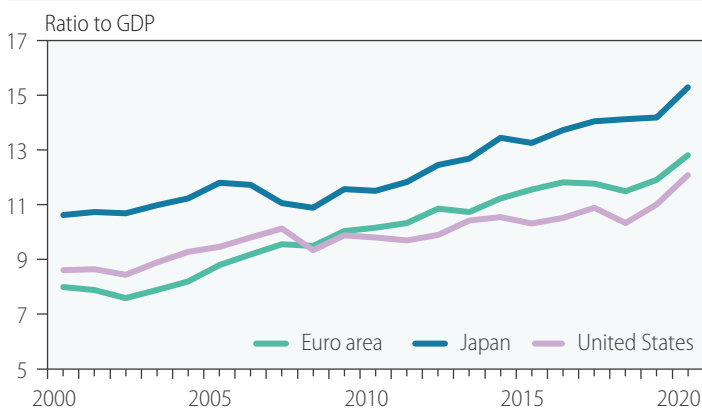
<sup>3</sup> Financial corporations include the monetary authority (central bank). General government consists of both central government and local governments. For presentation purposes, in the following sections, the institutional sectors are recategorized into five sectors and renamed as follows: financial sector (which is financial corporations in SNA2008), non-financial business sector (non-financial corporations), general government sector, households sector (households and NPISHs) and the non-residents sector (the rest of the world).

<sup>4</sup> Elizabeth Holmquist and Susan McIntosh (2015), *U.S. Net Wealth in the Financial Accounts of the United States*, FED Notes. <https://www.federalreserve.gov/econresdata/notes/feds-notes/2015/us-net-wealth-in-the-financial-accounts-of-the-united-states-20151008.html>.

At the end of the third quarter of 2020,<sup>5</sup> the total financial assets of the residents stood at 12.3 times of GDP in the euro area (EU-19), 15.3 times of GDP in Japan, 12.1 times of GDP in the United States. The size of total financial assets shows steady growth over the last 20 years (figure 1), except during the period of the Great Recession. Generally, the growth of total financial assets represents the financial deepening of those countries. It is empirically known that the size of the financial sector grows as an economy grows. Also, if all financing is made through the financial sector, the financial sector's total net financial assets equal to the sum of other sectors' liabilities. For some countries, financings are increasingly made outside the financial sector through financial markets. A case in point is the United States, where the total financial assets' growth strongly reflects the growing value of corporate equities relative to GDP. The growth also reflects a strong incentive for savings in an ageing society where pension funds and insurance companies accumulate financial assets, notably in Japan's case.

Summing across domestic sectors (financial, non-financial business, households, general government) and the non-residents sector, the total financial assets match the total liabilities. Figures 2, 3 and 4 show the pattern of assets-liabilities distribution over the institutional sectors for the euro area, Japan, and the United States, respectively as of the end of September 2020. A common pattern observed here is that households are the net creditor while non-financial business and general government are the net debtors. The financial sector's assets and liabilities in total are in principle matches as it functions as a financial intermediary between creditors and debtors of other sectors. The non-residents sector is a clear net creditor in the United States and debtor in Japan, which indicate the United States is the debtor and Japan is the creditor to the rest of the world.

Figure 1  
**Total domestic financial assets**

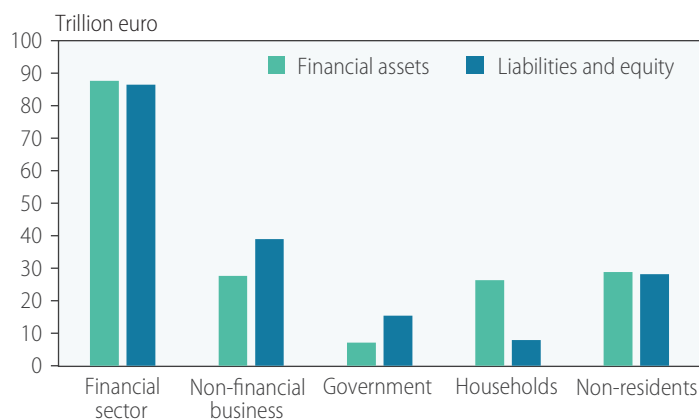


Sources: UN DESA based on WEFM Database; European Central Bank, Euro Sector Accounts; Bank of Japan, Flow of Funds; Federal Reserve, Financial Accounts.  
Note: For 2020, the values are for the third quarter.

<sup>5</sup> For the euro area, the financial accounts are part of European sector accounts compiled by the European Central Bank: <https://sdw.ecb.europa.eu/browse.do?node=9691132>. For Japan, the financial accounts are named Flow of Funds and compiled by the Bank of Japan: <https://www.boj.or.jp/en/statistics/sj/index.htm/>. For the United States, the financial accounts are compiled by the Federal Reserve as Financial Accounts of the United States: <https://www.federalreserve.gov/releases/z1/default.htm>.

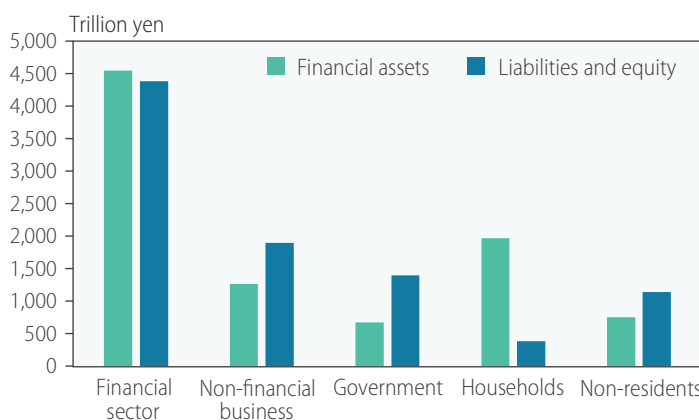
A distinctive feature of the assets-liabilities distribution in the United States (figure 4) is the high share of non-loan financing of the non-financial business sector through equity issues. The households sector holds the equity directly, rather than through financial intermediaries. Compared to the United States, the size of financial assets in the financial sector is close to the size of the total liabilities of the other sectors in the euro area and Japan (figures 2 and 3). These patterns imply that the financial sector still plays a primary role in financing in the euro area and Japan.

Figure 2  
**Financial assets and liabilities in Euro area at the end of September 2020**



Sources: UN DESA based on European Central Bank, Euro Sector Accounts.

Figure 3  
**Financial assets and liabilities in Japan at the end of September 2020**



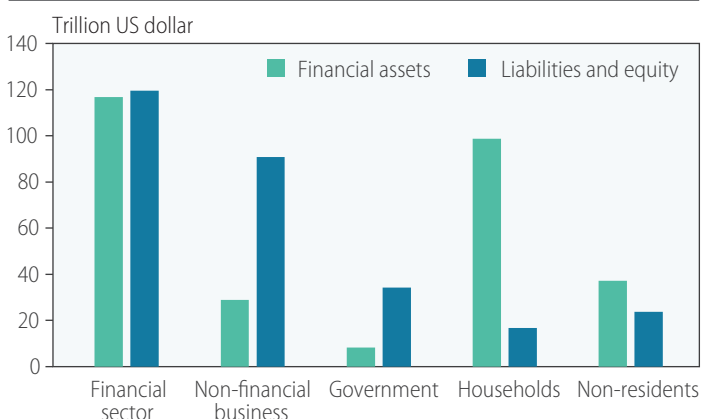
Sources: UN DESA based on Bank of Japan, Flow of Funds.

## Non-financial businesses and households' deposits are largely funding mounting public debt

Developed countries and developing countries with sufficient fiscal spaces implemented the most extensive economic stimulus packages in history to fight the COVID-19 economic crisis. Public debt soared to record levels in many countries. In parallel, central banks shifted to highly accommodative policy stances with historically

Figure 4

## Financial assets and liabilities in the United States at the end of September 2020



Sources: UN DESA based on Federal Reserve, Financial Accounts of the United States.

low policy interest rates and accelerated asset purchases. While there are compelling arguments for rolling out further fiscal stimulus to minimize the economic impact of the pandemic and accelerate recovery, soaring public debt levels present serious concerns.

During the first nine months of 2020, the public debt increased by €1.1 trillion (or 10 per cent from the end of 2019) in the euro area, by ¥62 trillion (or 5 per cent) in Japan, and by US\$4 trillion (18 per cent) in the United States. At the end of September, the size of the public debt stood at 97 per cent of GDP in the euro area, 233 per cent in Japan, and 124 per cent in the United States. In terms of the total financial assets, it stood at 7.6 per cent in the euro area, 16 per cent in Japan, and 10 per cent in the United States.

The newly-issued public debt securities were purchased by the financial sectors, particularly central banks. During the first nine months of 2020, the financial sectors' public debt holding increased by €1.1 trillion (of which €757 billion by the European Central Bank), by ¥73 trillion (of which ¥51 trillion by the Bank of Japan), and by US\$4.2 trillion (of which US\$2.5 trillion by the Federal Reserve). In the euro area, the amount of new public debt securities matches the amount the financial sector purchased. In Japan and the United States, the financial sector purchased public debt securities slightly more than the amount newly issued, which implies that the financial sectors purchased public debt securities from non-financial business and households sectors.

The main counterpart liabilities of the financial sector's increased public debt holdings are deposits which have also surged. Total cash and deposits of the non-financial business and households sectors approximates broad money stock.<sup>6</sup> For the first three quarters of 2020, the non-financial business and households sectors' deposits increased by €952 billion in the euro area, ¥71 trillion in Japan, and US\$3.3 trillion in the United States.

<sup>6</sup> Total cash and deposits of the non-financial business and households sectors approximates broad money stock, M3 and the euro area and Japan, M2 in the United States. There are slight differences between the two in published data.

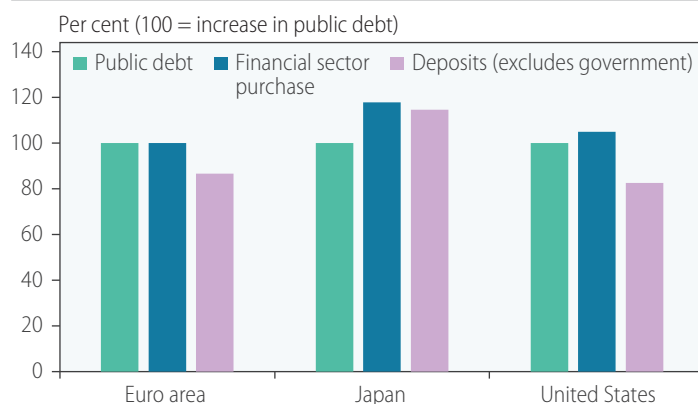
The relatively large difference between the increased public debt securities and the deposits in the United States reflects a sizeable Government deposit at the Federal Reserve of US\$1.1 trillion.<sup>7</sup> The increased portion of public debt was largely absorbed in non-financial business and households sectors' deposits through financial intermediaries (figure 5).

The question here is why the deposits, or the broad money stocks, have grown so much as to almost fully absorb the mounting public debt in 2020. Money stock growth can involve several factors. One driver is the growth of credit extended by deposit-taking commercial banks. Whenever a bank makes a loan, it simultaneously creates a matching deposit in the borrower's bank account, thereby creating new money—the credit effect on monetary growth.<sup>8</sup> Another factor is the savings effect, the increase of deposits resulting from higher savings out of income streams. A third factor is the portfolio effect, arising when the preference of depositors for more liquid assets leads them to sell their less liquid non-deposit financial assets and to increase their deposits at the commercial banks. Such shifts in liquidity preferences usually reflect changes in risk perception—as more risks are perceived, liquidity preference tends to be strengthened.

Figures 6, 7 and 8 show quarterly change in deposits of the non-financial business and the households sectors, quarterly change in loans granted to those sectors, and the ratio of deposits to total financial assets in the euro area, Japan, and the United States, respectively. In the pre-crisis period, the change in deposits and loans can be seen closely related. Usually, excess growth of loans over deposits is followed by an excess growth of deposits

Figure 5

## Change over the first 9 months of 2020, relative to the increase in public debt



Sources: UN DESA based on European Central Bank, Euro Sector Accounts; Bank of Japan, Flow of Funds; Federal Reserve, Financial Accounts.

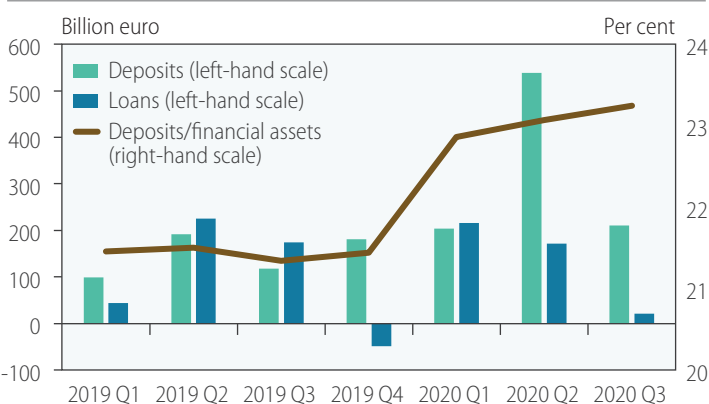
<sup>7</sup> General government's deposits to the central bank are not part of money stock.

<sup>8</sup> An earlier example of the decomposition of money stock growth into the credit effect and the portfolio effect, using the financial accounts data is in Louia Bê Duc and Gwenaël Le Breton (2009), Flow-of-funds analysis at the ECB: Framework and application, ECB Occasional paper series No. 105. While the analysis here is conceptually the same, the definition of the credit effect is narrower as it focuses on loans growth only.

over loans and vice-versa. At the onset of the COVID-19 crisis, the deposits grew disproportionately more than the growth of loans.

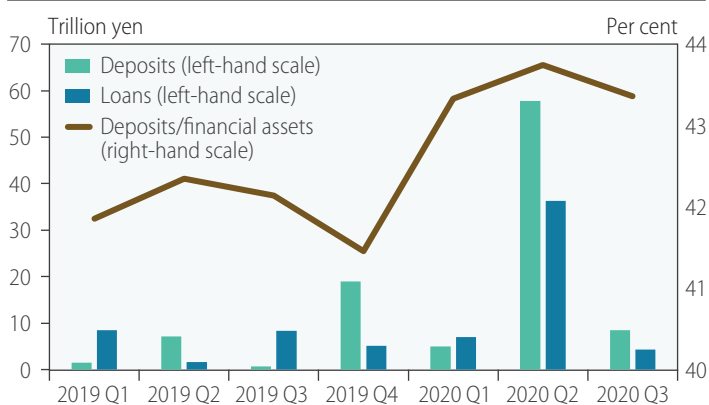
The portion of the deposits growth that cannot be explained by the loans growth is attributed to a combination of the savings effect and the portfolio effect. The savings of the households sector increased dramatically in developed countries in the first half of 2020. At its peak in the second quarter of 2020, the saving rate stood at 22 per cent for the euro area and Japan, and 26 per cent for the United States. Despite some fiscal cushion, non-financial businesses and households increased the savings amid limited spending and investment opportunities. Also, those savers kept the funds in deposits for their strong liquidity preferences and high risk-aversion during the crisis. The liquidity preferences are shown as rising ratios of deposits to the non-financial business and households sectors' total financial assets. The ratio jumped by 1.8 percentage points in the euro area (figure 6), 1.9 percentage points in Japan (figure 7), and 2 percentage points in the United States (figure 8). Those figures indicate strong portfolio substitutions to liquid assets, namely deposits, from other financial assets in the first three quarters of 2020.

Figure 6  
**Quarterly change in loans and deposits: Euro area**



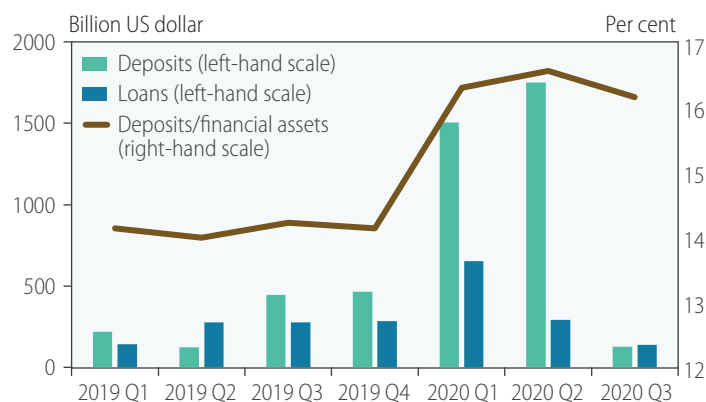
Sources: UN DESA based on European Central Bank, Statistical Data Warehouse on Euro sector accounts.

Figure 7  
**Quarterly change in loans and deposits and Deposits-to-total financial assets ratio: Japan**



Sources: UN DESA based on Bank of Japan, BoJ Time series data base on Flow of Funds.

Figure 8  
**Quarterly change in loans and deposits and Deposits-to-total financial assets ratio: United States**



Sources: UN DESA based on Federal Reserve, Financial Accounts of the United States

## Challenging policy environment calls for further international coordination

In the euro area, Japan and the United States, the mounting public debt is on delicate assets-liabilities balances. The deposits growth is projected to decline. The credit effect remains positive for the deposits growth as long as central banks' accommodative policies continue. However, the savings and portfolio effects can go negative for the deposits growth because the high propensity for savings and the high liquidity preferences observed in 2020 are essentially temporal phenomena closely linked to the current crisis. The recent strong liquidity preference will reverse when consumer confidence and business sentiment improve and consumption and investment spending return to their long-term trends. The demand for public debt from the financial sector may wane when the countering deposits growth stagnates, which results in declining prices of public debt securities and their rising yields. The yields of long-term public debt securities have already been on the rise in developed countries in February.

The examples of the euro area, Japan, and the United States present a challenging environment for policymakers, including difficult trade-offs between further fiscal stimulus and the rising cost of debt financing. Since there is a strong global consensus for rolling out additional fiscal measures for equitable, inclusive, and sustainable economic recovery at national levels, the international community must support Governments to implement further fiscal measures. To this end, the current situation calls for more international coordination to manage public debt securities and their prices globally. Such coordination can prevent potential financial turbulence due to abrupt drops in the prices, rises in the yields of public debt securities, supporting the implementations of additional fiscal measures to cope with the ongoing pandemic crisis and its socioeconomic impacts.