

3 Special features

A The benefits and costs of the international role of the euro at 20

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This year marks the 20th anniversary of the creation of the euro and of the adoption of the Eurosystem's position on its international role. It is therefore an appropriate time to take stock of developments in the use of the euro as a global currency and to assess whether, and how, the economic benefits and costs of the international use of the euro have evolved. This assessment takes place amid renewed calls among European policymakers to promote a stronger international role for the currency. In particular, the decision was taken at the Euro Summit of December 2018 to encourage "work to be taken forward to this end".⁴⁷

This special feature assesses changes in the economic benefits and costs arising from the international role of the euro from a central banking perspective. It provides evidence that the balance of benefits and costs has evolved since 1999, with some of the traditional effects of its status as an international currency having declined in relevance while others have become more apparent.

Taking stock of the ECB's position on the international role of the euro twenty years on

Since the launch of Economic and Monetary Union, the Eurosystem has advocated a policy of neutrality vis-à-vis the international role of the euro. This was stressed in the first speech of President Duisenberg in January 1999 and in a Monthly Bulletin article published in August 1999, which stated that currency status is market-driven and that the Eurosystem neither hinders nor fosters the internationalisation of the euro.⁴⁸

This position was the outcome of two views, one emphasising the economic benefits of international currency status, and the other emphasising the costs. Back in 1999 the main benefits of currency internationalisation discussed included seigniorage, lower transaction and hedging costs, added breadth and efficiency to the euro area financial markets, as well as the "exorbitant privilege" (the fact that international currency issuers have lower external financing costs). In particular, research suggests that the net return earned by the United States on its net international investment position due to the US dollar's role as the leading

⁴⁷ **Box 8** provides an overview of the Communication entitled "Towards a stronger international role of the euro" issued by the European Commission on 5 December 2018.

⁴⁸ See speech by Willem Duisenberg entitled "The euro has arrived" to the American European Community Association on 14 January 1999 at De Nederlandsche Bank in Amsterdam and ECB, "The international role of the euro", *Monthly Bulletin*, ECB, August 1999, pp. 31-54.

international currency is approximately 1-3% per year.⁴⁹ The main costs stressed were volatility in money aggregates and, in turn, in capital flows, which it was believed could complicate the conduct of monetary policy (see [Table 1](#)).

Table 1
Benefits and costs of international currency use: assessment in 1999

Benefits	Costs
Seigniorage	Blurred monetary aggregate signals
Lower transaction and hedging costs	Capital flow volatility
Exorbitant privilege (lower external financing costs)	

Source: ECB (1999), *op. cit.*

Twenty years on, the balance of benefits and costs of international currency status has evolved. With rapid financial globalisation, rising challenges to multilateralism and the adoption of new monetary policy frameworks across major central banks, the relevance of some of the traditional effects of international currency status has declined, while other effects have become more apparent. These developments, which may have a bearing on the conduct and transmission of monetary policy, need to be considered when assessing the balance of economic benefits and costs from a central bank perspective. Specifically, research has highlighted the following factors. First, that international currency status may strengthen the global transmission of domestic monetary policy impulses, with potential reinforcing spillback effects for the domestic economy (see [Table 2](#)); and, second, that it lowers exchange rate pass-through, which helps shield inflation from foreign shocks, while it may, at times, attenuate the effects of monetary policy on import prices; and, third, that the “exorbitant duty” of international currency status – the fact that international currencies appreciate in times of global stress and that their central banks of issue are called upon to assume greater responsibility for global financial stability – is the flipside of the traditional “exorbitant privilege” – i.e. of lower external financing costs. Finally, it can be argued that the traditional argument against a stronger international role of currencies, i.e. that it increases the volatility of monetary aggregates, has declined in prominence. The following section reviews these arguments in greater detail.

⁴⁹ There is no consensus on the extent of the “exorbitant privilege”; see, for example, the discussion in Gourinchas, Pierre-Olivier and Rey, Helene, “From world banker to world venture capitalist: US external adjustment and the exorbitant privilege”, *CEPREMAP Working Papers*, 2005; Clarida, R. H. (ed.), *G7 Current Account Imbalances: Sustainability and Adjustment*, University of Chicago Press, 2007, pp. 11-66; and Curcuru, S. E., Dvorak, T. and Warnock, F., “Cross-Border Returns Differentials”, *The Quarterly Journal of Economics*, Vol. 123(4), 2008, pp. 1495-1530. See [Special Feature B](#) for evidence on other countries, including the euro area.

Table 2

The balance of the benefits and costs of international currency use is changing

Benefits	Costs
Seigniorage	Blurred monetary aggregate signals (?)
Lower transaction and hedging costs	Capital flow volatility (?)
Exorbitant privilege (lower external financing costs)	Exorbitant duty (stronger exchange rate in global stress episodes)
Greater monetary policy autonomy	
Stronger international transmission of monetary policy with positive spillbacks	
Lower pass-through reduces impact of FX shocks on CPI	Lower effects of monetary policy on import prices
Reduced exposure to unilateral decisions from third countries	

Sources: ECB and Coeuré, B., "The euro's global role in a changing world: a monetary policy perspective", speech at the Council on Foreign Relations, New York City, 15 February 2019.

Salient developments

In principle, international currency issuers enjoy greater monetary autonomy.

Owing to the pre-eminence of the US dollar in the global monetary and financial system, US monetary policy drives – along with global risk appetite – global financial cycles in capital flows and financial asset prices (see **Box 6** for evidence in the context of the debate on whether the traditional monetary policy trilemma has morphed into a dilemma).⁵⁰ By contrast, central banks in small open economies are typically more heavily exposed to foreign spillovers in setting interest rates than those presiding over an internationally dominant currency.⁵¹ However, foreign factors may still at times influence domestic monetary and financial conditions of international currency issuers. This is suggested by the past experience of the Federal Reserve System. For instance, it is well documented that the large demand for US securities by foreign central banks in the run-up to the global financial crisis contributed to the decline in longer-term US interest rates, thereby partially offsetting the parallel tightening efforts by the Federal Open Market Committee (see **Special Feature B** for further discussion).⁵²

Expected benefits of seigniorage still exist but may have declined. The low interest rate environment has tended to reduce seigniorage benefits that can be expected from the euro's international role. An additional factor to consider is the

⁵⁰ See Rey, H., "Dilemma not trilemma: the global cycle and monetary policy independence", *Proceedings – Economic Policy Symposium – Jackson Hole*, Federal Reserve Bank of Kansas City, 2013, pp. 1-2) and Shin, H. S., "The bank/capital markets nexus goes global", speech at the London School of Economics and Political Science, 15 November 2016.

⁵¹ For a discussion of spillovers arising from US and euro area monetary policy shocks, see Ca'Zorzi, M., Dedola, L., Georgiadis, G., Jarociński, M., Stracca, L. and Strasser, G., "Monetary policy in a globalised world", *ECB Discussion Paper*, forthcoming.

⁵² See Bernanke, B., "The Global Saving Glut and the U.S. Current Account Deficit", speech at the Homer Jones Lecture, St. Louis, Missouri, 14 April 2005. On the impact and transmission channel of foreign official purchases on US Treasury yields in the mid-2000s, see also: Kaminska, I. and Zinna, G., "Official Demand for U.S. Debt: Implications for U.S. Real Interest Rates", *IMF Working Paper*, No 14/66, 2014; and Krishnamurthy, A. and Vissing-Jorgensen, A., "The Aggregate Demand for Treasury Debt", *Journal of Political Economy*, Vol. 120, No 2, 2012, pp. 233-267.

impact of increased use of electronic means of payments on the demand for banknotes.

Moreover, concerns about exposure to capital flow volatility as a consequence of international currency status are now less prominent. These concerns featured prominently in discussions about the internationalisation of the Deutschmark in the 1970s, when it was considered that volatile “hot money” flows into financial assets denominated in the Deutsche Mark increased volatility in M3 – the main monetary aggregate monitored by the Bundesbank – thereby complicating the conduct of monetary policy.⁵³ The enhanced tools for the ECB’s monetary analysis have made these concerns less prominent. Moreover, in a financial globalised economy, the influence of foreign factors on local monetary and financial conditions is not a feature specific to international currency issuers but a feature of any financially open economy.⁵⁴

An additional aspect on which more evidence is now available is that international currency status strengthens the global transmission of monetary policy. This reflects the fact that stronger use of a currency as an international funding unit amplifies the international transmission of monetary policy. This channel is well documented for the US dollar and US monetary policy.⁵⁵ When US monetary policy eases, the US dollar depreciates; international lending in dollars grows, because the balance sheets of borrowers in emerging market economies, who often borrow in dollars, appear stronger in US dollar terms; this, in turn, encourages global banks to provide the borrowers in question with US dollar-denominated credit (see the left panel of **Chart 22**).⁵⁶ Another channel for greater international transmission of liquidity shocks may reflect the role of international credit markets within global banking groups. Global banks respond to domestic monetary shocks by managing liquidity globally through an internal reallocation of funds, which affects their foreign lending.⁵⁷

Monetary policy impulses may reverberate globally as a consequence, with wider and possibly larger domestic effects owing to spillbacks. For instance, for an issuer of an international currency, a domestic interest rate cut would ease financial

⁵³ For further details, see Eichengreen, B., Mehl, A. and Chitu, L., *How Global Currencies Work – Past, Present, and Future*, Princeton University Press, 2017.

⁵⁴ By one recent estimate, global financial conditions account for about 20-40% of the variation in countries’ local financial conditions; see Arregui, N., Elekdag, S., Gelos, G., Lafarguette, R. and Seneviratne, D., “Can Countries Manage Their Financial Conditions Amid Globalization?”, *IMF Working Paper*, No 18/15, 2018. There is no empirical evidence that financial markets in international currencies are significantly more volatile than those in other currencies.

⁵⁵ Evidence for the international transmission of ECB monetary policy is scarce. One of the few existing studies points to notable international spillovers of ECB monetary policy, suggesting that euro area banks increase lending to the rest of the world in response to monetary policy accommodation by the ECB (see Gräß, J. and Żochowski, D., “The international bank lending channel of unconventional monetary policy”, *Working Paper Series*, No 2109, ECB, Frankfurt am Main, November 2017). See below in this special feature on the role of invoicing and **Special Feature C**.

⁵⁶ See Bruno, V. and Shin, H. S., “Capital flows and the risk-taking channel of monetary policy”, *Journal of Monetary Economics*, Vol. 71(C), 2015, pp. 119-132 for the argument that looser US monetary policy encourages global banks to leverage more in dollars (on the supply side) and incentivises emerging markets to borrow more in dollars (on the demand side).

⁵⁷ Cetorelli, N. and Goldberg, L. (2012), op. cit. suggests that, in contrast, domestic monetary policy transmission may be dampened.

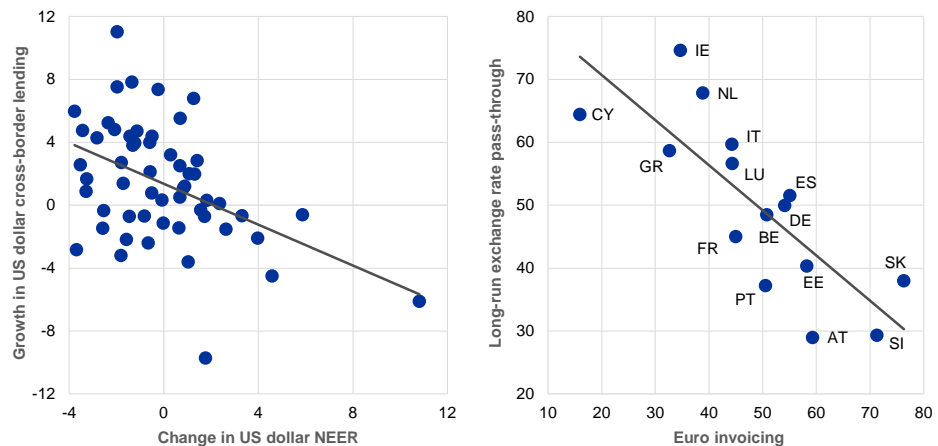
conditions globally and feed demand across the world.⁵⁸ The domestic economy could benefit from spillback effects, especially in an economy like the euro area, which is more open to trade than other major economies.

Chart 22

The balance of the benefits and costs of international currency use is changing

Evidence of an international risk-taking channel of monetary policy (left panel) and exchange rate pass-through to import prices versus euro invoicing across euro area countries (right panel)

(left panel: percentages; right panel: percentages and percentages of imports)



Sources: BIS, ECB and ECB staff calculations.

Notes: left panel: growth in US dollar lending refers to quarterly changes in cross-border loans and deposits in US dollars of BIS reporting banks; NEER stands for nominal effective exchange rate (positive changes indicate a US dollar appreciation); the sample period is Q1 2002-Q3 2015 as in Avdjiev, S., Koch, C. and Shin, H. S., "Exchange rates and the transmission of global liquidity", paper presented at the 2018 ASSA Annual Meeting; the black line is a fitted regression line. Right panel: long-run exchange rate pass-through is estimated using a standard log-linear regression model of the quarterly log change in import price unit values on the quarterly changes of the standard broad measure of the NEER-38 of the euro, a quarterly effective measure of inflation in production costs of the euro area's major trading partners and the quarterly log change in industrial production (excluding construction); the estimation sample spans the time period from the first quarter of 2000 to the last quarter of 2014; the share of euro invoicing reported on the x-axis is the average over the sample period; the black line is a fitted regression line.

On the other hand, the “exorbitant duty” arising from international currency status has become more apparent since the global financial crisis as the flipside of the traditional “exorbitant privilege”. Because debt securities

denominated in US dollars are seen as particularly safe and liquid by international investors, the US dollar tends to be seen as a safe haven in times of heightened global financial stress. In turn, the US dollar appreciates in episodes of global stress, as it did immediately after the collapse of Lehman Brothers in autumn 2008.⁵⁹ This led to a decline in the US net international investment position and to large negative external wealth effects for the United States.⁶⁰

⁵⁸ As regards bank lending specifically, an International Banking Research Network of 17 countries found that global spillovers are confined to US monetary policy, affect mainly interbank lending and, to a lesser extent, lending to non-banks (see Buch, C., Bussière, M., Goldberg, L. and Hills, R., "The International transmission of monetary policy," *Journal of International Money and Finance*, Vol. 91, 2019, pp. 29-48). However, this study did not focus on spillovers to other forms of capital flows.

⁵⁹ See, for example, Gourinchas, P.-O., Govillot, N. and Rey, H., "Exorbitant Privilege and Exorbitant Duty", *Working Paper*, UC Berkeley, 2011 and Caballero, R. J., Farhi, E. and Gourinchas, P.-O. "Global Imbalances and Currency Wars at the ZLB", *NBER Working Paper*, No 21670, 2015.

⁶⁰ Large wealth effects reflect the sharp increase in gross international investment positions, which have more than trebled over the past twenty years,

Another consideration is that reserve currency issuers may face requests for currency swap lines when availability of international liquidity dries up. This is suggested by the experience during the global financial crisis, when major central banks were more active in providing swap lines.⁶¹ The provision of currency swap lines has been carried out by all major central banks issuing international currencies, in full independence and in line with their respective mandates. Standing swap networks now exist. The global network of currency swap lines has expanded in the past decade, driven also by China's policies to support the renminbi (see **Box 7** for a review of the debate on the link between currency swap lines and international currency status).

Finally, it is now also more apparent that international currencies have lower exchange rate pass-through. The more the domestic currency is used for invoicing international trade transactions, the lower the pass-through to import prices from exchange rate movements. This holds not only over the short run, when prices are sticky, but also over the long run, when they are adjusted by producers.⁶² The close correlation between domestic currency invoicing and exchange rate pass-through is noticeable in the euro area (see the right panel of **Chart 22**).⁶³ Lower pass-through has two main implications for the conduct and transmission of monetary policy.

First, the effect of domestic monetary policy on import prices is more limited when pass-through is low. If more trade were invoiced in euro, for instance, import prices would react less to an exchange rate depreciation resulting from an accommodative domestic monetary policy shock, as simulations from calibrated general equilibrium models suggest.⁶⁴ At the same time, interest rate changes have larger spillovers and spillbacks. In other words, the relative importance and interaction of the interest rate and exchange rate channels of monetary policy change.

Second, lower pass-through shields the Consumer Price Index (CPI) from foreign disturbances affecting the exchange rate. In a low pass-through environment, import prices, and hence inflation as well as inflation expectations, are better shielded from foreign exchange shocks.⁶⁵

⁶¹ For a review of the ECB's experience with temporary swap lines between major central banks over recent years, see ECB, "Experience with foreign currency-liquidity providing central banks", Monthly Bulletin, ECB, Frankfurt am Main, August 2014, pp. 65-82. It has been argued that swap agreements among central banks may be a stabilising element increasing the resilience of the international monetary system (see, for instance, Bahaj, S. and Reis, R., "Central bank swap lines", *Discussion Paper*, No 1816, Centre for Macroeconomics, 2018).

⁶² See Gopinath, G., Itskhoki, O. and Rigobon, R., "Currency choice and exchange rate pass-through", *American Economic Review*, Vol. 100(1), 2010, pp. 304-336.

⁶³ For further details, see ECB, *The international role of the euro*, Frankfurt am Main, 2015.

⁶⁴ This is suggested, for example, by the analysis of Casas, C., Diez, F., Gopinath, G. and Gourinchas, P.-O., "Dominant currency paradigm: A new model for small open economies", *IMF Working Paper*, No 17/264, 2017. See also **Special Feature B** for further discussion.

⁶⁵ This may in fact be one reason why the Federal Reserve System is traditionally believed to pay less attention to international developments than other central banks: the dominant role of the US dollar in international trade invoicing results in a low pass-through of forex shocks to the US economy. For more details on this traditional interpretation, see, for example, Eichengreen, B., "Does the Federal Reserve care about the rest of the world?", *Journal of Economic Perspectives*, Vol. 27(4), 2013, pp. 87-104.

Conclusions

The balance of economic benefits and costs arising from the international role of the euro has evolved since 1999. The relevance of some of the traditional effects of international currency status has declined, while other effects have become more apparent. Changes in the global role of the euro would have consequences for the conduct of monetary policy, all of which need to be understood and taken into account when designing the common monetary policy for the euro area.