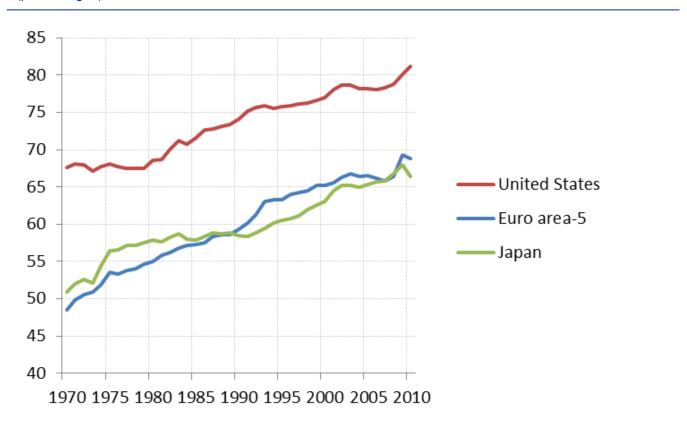**Benoît Cœuré**
Member of the Executive Board

The rise of services and the transmission of monetary policy

Geneva,

16 May 2019

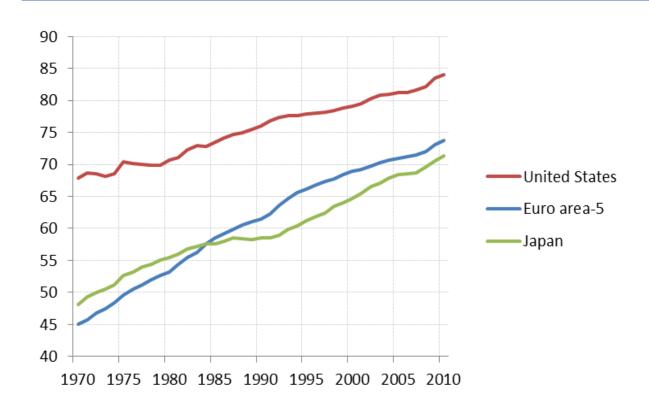## Share of services in gross value added
(percentages)

Sources: Haver Analytics, ECB calculations and Timmer, M. P., de Vries, G. J., and de Vries, K. (2015), "Patterns of Structural Change in Developing Countries", in J. Weiss and M. Tribe (Eds.), Routledge Handbook of Industry and Development, pp. 65-83, Routledge.

Notes: Euro area-5 refers to Germany, France, Italy, Spain and the Netherlands. Data for Germany prior to 1991 have been backcasted using growth rates for West Germany. Consistent data across advanced economies are only available up to 2010.

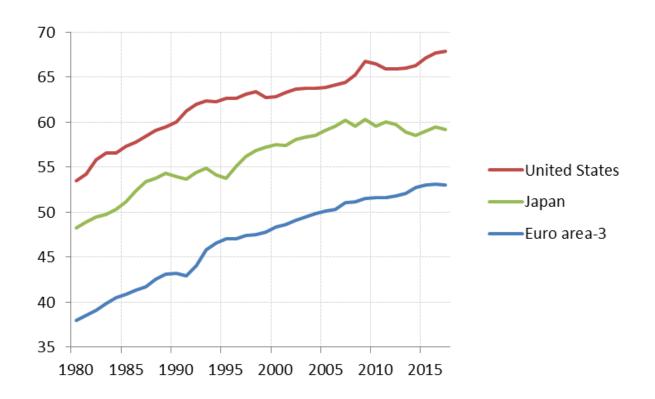## Share of services in total employment
(percentages)

Sources: Haver Analytics, ECB calculations and Timmer, M. P., de Vries, G. J., and de Vries, K. (2015), "Patterns of Structural Change in Developing Countries", in J. Weiss and M. Tribe (Eds.), Routledge Handbook of Industry and Development, pp. 65-83, Routledge.

Notes: Euro area-5 refers to Germany, France, Italy, Spain and the Netherlands. Data for Germany prior to 1991 have been backcasted using growth rates for West Germany. Consistent data across advanced economies are only available up to 2010.

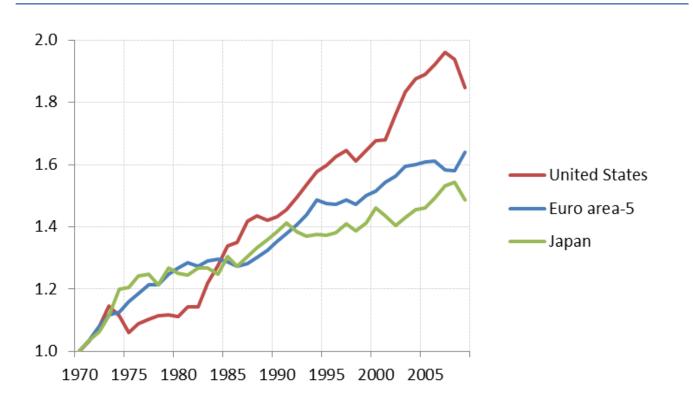**Share of services in household final consumption expenditures**
(percentages)

Sources: Haver Analytics, ECB calculations and OECD Annual National Accounts.

Notes: Euro area-3 refers to Germany, France and Italy. Sector classification according to ISIC Rev.4. For Italy, data prior to 1995 have been backcasted using data according to ISIC Rev. 3. Data for Germany prior to 1991 have been backcasted using growth rates for West Germany.

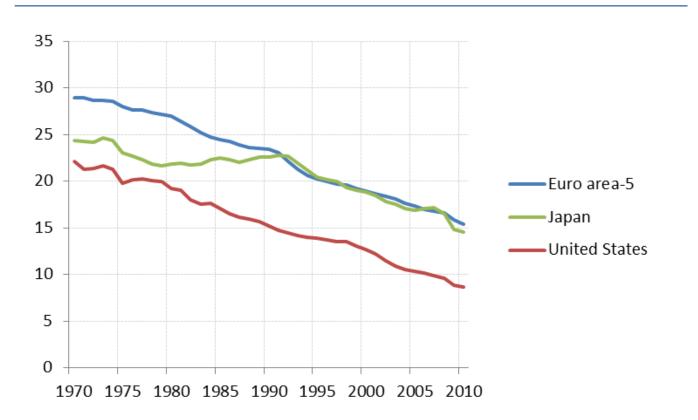**Gross value added deflator of services over manufacturing**
(indices: 1970 = 1)

Sources: Haver Analytics, ECB calculations and Timmer, M. P., de Vries, G. J., and de Vries, K. (2015), "Patterns of Structural Change in Developing Countries", in J. Weiss and M. Tribe (Eds.), Routledge Handbook of Industry and Development, pp. 65-83, Routledge.

Notes: Euro area-5 refers to Germany, France, Italy, Spain and the Netherlands. Data for Germany prior to 1991 have been backcasted using growth rates for West Germany. Consistent data across advanced economies are only available up to 2010.

Share of manufacturing in total employment
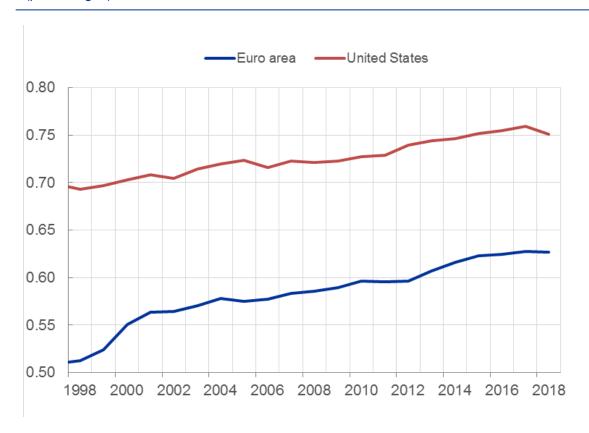(percentages)

Sources: Haver Analytics, ECB calculations and Timmer, M. P., de Vries, G. J., and de Vries, K. (2015), "Patterns of Structural Change in Developing Countries", in J. Weiss and M. Tribe (Eds.), Routledge Handbook of Industry and Development, pp. 65-83, Routledge.

Notes: Euro area-5 refers to Germany, France, Italy, Spain and the Netherlands. Data for Germany prior to 1991 have been backcasted using growth rates for West Germany. Consistent data across advanced economies are only available up to 2010.

Share of services in core inflation
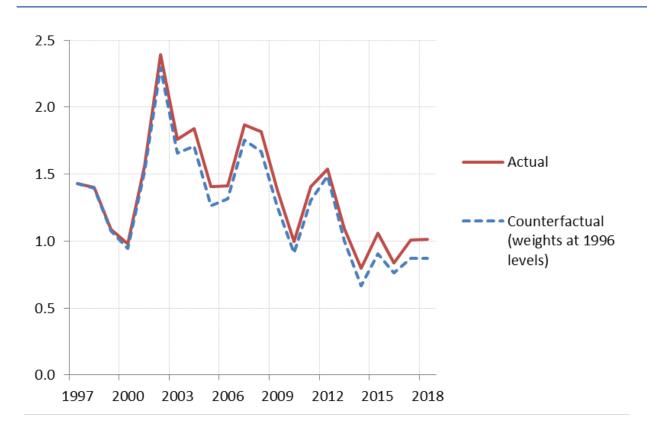(percentages)

Sources: Eurostat, US Bureau of Labor Statistics, Haver Analytics and ECB calculations.

Notes: For the euro area, data refer to the HICP excluding energy and food. For the United States, data refer to the share of services, less energy services, in the CPI excluding energy and food.

Euro area HICP excluding energy and food
(annual percentage change)

Notes: The counterfactual has been computed holding the share of services and non-energy industrial goods constant at their 1996 levels.

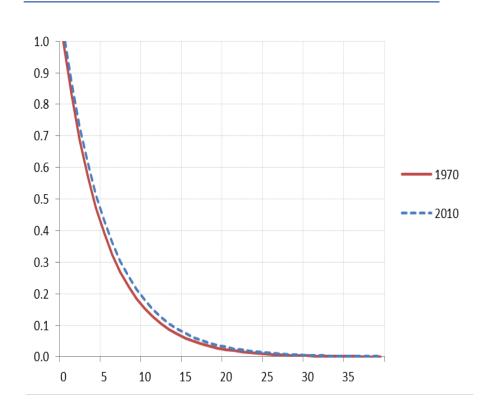# The rise of services increases the lag of monetary policy transmission

Inflation response to an easing of monetary policy
(y-axis: percent; x-axis: quarters)

Output response to an easing of monetary policy
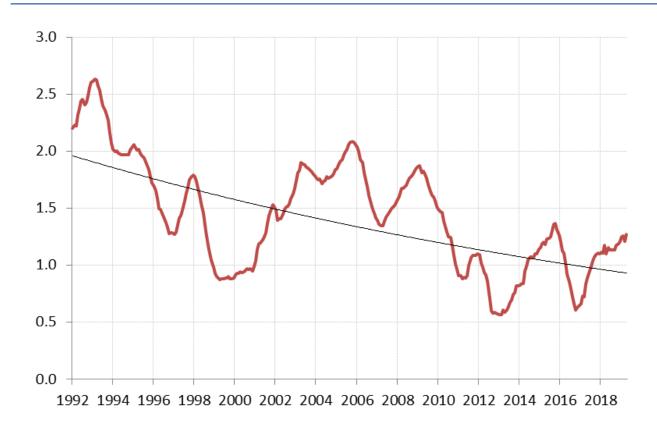(y-axis: percent; x-axis: quarters)

Sources: ECB calculations and Galesi, A. and Rachedi, O. (2018), "Services Deepening and the Transmission of Monetary Policy", *Journal of the European Economic Association*, pp. 1-33

Notes: Calibrated to match the sectoral reallocation experienced by the five largest euro area economies (Germany, France, Italy, Spain and the Netherlands) from 1970 to 2010. The standard deviation of the monetary policy shock is calibrated such that the response of inflation in the 1970 steady-state equals 1% . All other structural parameters of the model are kept constant.

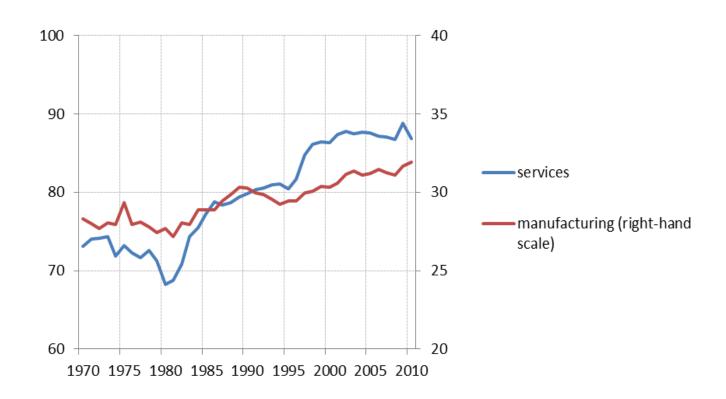## Difference between euro area services and NEIG inflation

(percentage per annum)

Sources: Haver and ECB calculations.

Notes: Solid line refers to fitted exponential trend.

Services input in the production of final services and goods
(percentages)

Sources: Bureau of Economic Analysis and ECB calculations.

Response of US inflation to an easing of monetary policy
(y-axis: percent; x-axis: quarters)

Sources: ECB calculations and Galesi, A. and Rachedi, O. (2018), "Services Deepening and the Transmission of Monetary Policy", *Journal of the European Economic Association*, pp. 1-33

Notes: Calibrated to match the sectoral reallocation experienced by the United States from 1970 to 2010. The standard deviation of the monetary policy shock is calibrated such that the response of inflation in the 1970 steady-state equals 1%. All other structural parameters of the model are kept constant.

Thank you for your attention