

A list of available models

**A LIST OF MODELS AVAILABLE IN THE MACROECONOMIC MODEL DATA BASE
(VERSION 3.3, 161 MODELS*)**

* There are in total 161 models available, including all model variations such as adaptive learning versions, extended models or re-estimated models.

1. CALIBRATED MODELS (45 MODELS)		
1.1	NK_AFL15 ²	Angeloni et al. (2015)
1.2	NK_BGEU10	Blanchard and Galí (2010) Calibrated for the European labor market
	NK_BGUS10	Blanchard and Galí (2010) Calibrated for the U.S. labor market
1.3	NK_BGG99	Bernanke et al. (1999)
1.4	NK_CDK24	Chan et al. (2024)
1.5	NK_CFP10	Carlstrom et al. (2010)
1.6 ¹	NK_CGG99	Clarida et al. (1999)
1.7 ¹	NK_CGG02	Clarida et al. (2002)
1.8 ¹	NK_CK08	Christoffel and Kuester (2008)
1.9 ¹	NK_CKL09	Christoffel et al. (2009)
1.10	NK_CW09	Curdia and Woodford (2009)
1.11	NK_DEFK17	Del Negro et al. (2017)
1.12	NK_DT12	De Fiore and Tristani (2013)
1.13	NK_ET14	Ellison and Tischbirek (2014)
1.14	NK_FLMF18	Filardo et al. (2018)
1.15	NK_FNL23	Ferrari and Nispi Landi (2023)
1.16	NK_GHP16	Gnocci et al. (2016)
1.17	NK_GK11	Gertler and Karadi (2011)
	NK_GK09lin	linear model based on the working paper of Gertler and Karadi (2011)
1.18	NK_GK13	Gertler and Karadi (2013)
1.19	NK_GLSV07	Galí et al. (2007)
1.20	NK_GM05	Galí and Monacelli (2005)
1.21	NK_GM07	Goodfriend and McCallum (2007)
1.22	NK_GM16	Galí and Monacelli (2016)
1.23	NK_GS14	Gambacorta and Signoretti (2014)
1.24	NK_GSSZ17	Gilchrist et al. (2017)
1.25	NK_IR04	Ireland (2004)
1.26	NK_JO15ht	Jang and Okano (2015) - high trading
	NK_JO15lt	Jang and Okano (2015) - low trading
1.27	NK_KM16	Krause and Moyen (2016)
1.28	NK_KRS12	Kannan et al. (2012)
1.29	NK_KW16	Kirchner and van Wijnbergen (2016)
1.30 ¹	NK_LWW03	Levin et al. (2003)
1.31 ¹	NK_MCN99cr	McCallum and Nelson (1999), (Calvo-Rotemberg model)
1.32	NK_MI14	Michaillat (2014)
1.33	NK_MM10	Meh and Moran (2010)
1.34	NK_MPT10	Monacelli et al. (2010)
1.35	NK_NS14	Nakamura and Steinsson (2014)
1.36	NK_PP17	Paoli and Paustian (2017)
1.37	NK_PSV16	Pancrazi et al. (2016)
1.38	NK_RA16	Rannenberg (2016)
1.39 ¹	NK_RW06	Ravenna and Walsh (2006)
1.40 ¹	NK_RW97	Rotemberg and Woodford (1997)
1.41	NK_ST13	Stracca (2013)
1.42	RBC_DTT11	De Fiore et al. (2011)

2. ESTIMATED US MODELS (66 MODELS)		
2.1	US_ACELm	Altig et al. (2005), (monetary policy shock)
	US_ACELswm	no cost channel as in Taylor and Wieland (2011) (mon. pol. shock)
	US_ACELswt	no cost channel as in Taylor and Wieland (2011) (tech. shocks)
	US_ACELt	Altig et al. (2005), (technology shocks)
2.2	US_AJ16	Ajello (2016)
2.3	US_BB18	Balke and Brown (2018)
2.4	US_BKM12	Bils et al. (2012)
2.5	US_CCF12	Chen et al. (2012)
2.6	US_CCTW10	Smets and Wouters (2007) model with rule-of-thumb consumers, estimated by Cogan et al. (2010)
2.7	US_CD08	Christensen and Dib (2008)
2.8	US_CET15	Christiano et al. (2015)
2.9	US_CFOP14	Carlstrom et al. (2014)
2.10	US_CFP17exo	Carlstrom et al. (2017) - exogenous level of long-term debt
	US_CFP17endo	Carlstrom et al. (2017) - endogenous level of long-term debt
2.11	US_CMR10	Christiano et al. (2010)
	US_CMR10fa	Christiano et al. (2010) - small version with financial accelerator
2.12	US_CMR14 ³	Christiano et al. (2014)
	US_CMR14noFA ³	Christiano et al. (2014)-Version without financial frictions
2.13	US_CPS10	Cogley et al. (2010)
2.14	US_DG08	De Graeve (2008)
2.15	US_DNGS15	Del Negro et al. (2015)
	US_DNGS15_SW	Del Negro et al. (2015) w/o financial frictions
	US_DNGS15_SWpi	Del Negro et al. (2015) w/o financial frictions and time-varying inflation target
	US_DNGS15_SWSP	Del Negro et al. (2015) reestimation of Smets and Wouters (2007) with longer time-series
2.16	US_FGKR15	Fernández-Villaverde et al. (2015)
2.17	US_FM95	Fuhrer and Moore (1995)
2.18	US_FMS13	Fève et al. (2013)
2.19	US_FRB03	Federal Reserve Board model linearized as in Levin et al. (2003)
2.20 ¹	US_FRB08	linearized by Brayton and Laubach (2008)
	US_FRB08mx	linearized by Brayton and Laubach (2008), (mixed expectations)
2.21	US_FRB22_mceall	Brayton and Reifschneider (2022): all expectations are model consistent
	US_FRB22_mcapwp	Brayton and Reifschneider (2022): financial market, wage and price expectations are model consistent, other expectations are based on a small VAR
	US_FRB22_mcap	Brayton and Reifschneider (2022): financial market expectations are model consistent, other expectations are based on a small VAR
	US_FRB22_var	Brayton and Reifschneider (2022): all expectations are based on VAR predictions
2.22	US_FU19	Fratto and Uhlig
2.23	US_FV10	Fernández-Villaverde (2010)
2.24	US_FV15	Fernández-Villaverde et al. (2015)
2.25	US_HL16	Hollander and Liu (2016)
2.26	US_IAC05	Iacoviello (2005)
2.27	US_IN10	Iacoviello and Neri (2010)
2.28	US_IR11	Ireland (2011)
2.29	US_IR15	Ireland (2015)

2. ESTIMATED US MODELS (CONTINUED)		
2.30	US_JPT11	Justiniano et al. (2011)
2.31	US_KK14	Kliem and Kriwoluzky (2014)
2.32	US_KS15	Kriwoluzky and Stoltenberg (2014)
2.33	US_LTW17	Leeper et al. (2017)
	US_LTW17gz	Leeper et al. (2017) - different fiscal rule
	US_LTW17nu	Leeper et al. (2017) - no government consumption in utility function
	US_LTW17rot	Leeper et al. (2017) - rule of thumb consumers
2.34	US_LWY13	Leeper et al. (2013)
2.35 ¹	US_MI07	Milani (2007)
2.36	US_MR07	Mankiw and Reis (2007)
2.37 ¹	US_OR03	Orphanides (2003)
2.38	US_OW98	Orphanides and Wieland (1998) equivalent to MSR model in Levin et al. (2003)
2.39 ¹	US_PM08	IMF projection model US, Carabenciov et al. (2008)
2.40	US_PM08fl	IMF projection model US (financial linkages),Carabenciov et al. (2008)
2.41	US_PV15	Poutineau and Vermandel (2015b)
2.42	US_RA07	Rabanal (2007)
2.43	US_RE09	Reis (2009)
2.44 ¹	US_RS99	Rudebusch and Svensson (1999)
2.45	US_SW07	Smets and Wouters (2007)
2.46	US_VI16bgg	Villa (2016) - with Bernanke et al. (1999) financial accelerator
	US_VI16gk	Villa (2016) - with Gertler and Karadi (2013) financial friction
2.47 ¹	US_VMDno	Verona, Martins and Drumond (Verona et al. (2013)) - Normal times
2.48 ¹	US_VMDop	Verona, Martins and Drumond (Verona et al. (2013)) - Optimistic times
2.49 ¹	US_YR13	Rychalovska (2016)
3. ESTIMATED EURO AREA MODELS (20 MODELS)		
3.1	EA_ALSV06	Andrés et al. (2006)
3.2	EA_AWM05	ECB's area-wide model linearized as in Dieppe et al. (2005)
3.3	EA_BE15	Benchimol (2015)
3.4	EA_BF17	Benchimol and Fourçans (2017)
3.5 ¹	EA_CKL09	Christoffel et al. (2009)
3.6	EA_CW05ta	Coenen and Wieland (2005), (Taylor-staggered contracts)
	EA_CW05fm	Coenen and Wieland (2005), (Fuhrer-Moore-staggered contracts)
3.7	EA_DKR11	Darracq Paries et al. (2011)
3.8	EA_GE10	Gelain (2010)
3.9	EA_GNSS10	Gerali et al. (2010)
3.10	EA_PV15	Poutineau and Vermandel (2015a)
3.11	EA_PV16	Priftis and Vogel (2016)
3.12	EA_PV17	Priftis and Vogel (2017)
3.13	EA_QR14 ³	Quint and Rabanal (2014)
3.14	EA_QUEST3	QUEST III Euro Area Model of the DG-ECFIN EU, Ratto et al. (2009)
3.15	EA_SR07	Sveriges Riksbank euro area model of Adolfson et al. (2007)
3.16	EA_SW03	Smets and Wouters (2003)
3.17	EA_SWW14	Smets et al. (2014)
3.18	EA_VI16bgg	Villa (2016) - with Bernanke et al. (1999) financial accelerator
	EA_VI16gk	Villa (2016) - with Gertler and Karadi (2013) financial friction

4. ESTIMATED/CALIBRATED MULTI-COUNTRY MODELS (10 MODELS)		
4.1	DEREA_GEAR16	Gadatsch et al. (2016) model of Germany, EMU, and RoW
4.2	ESREA_FIMOD12	Stähler and Thomas (2012) model of Spain and EMU
4.3	G2_SIGMA08	The Federal Reserve's SIGMA model from Erceg et al. (2008) calibrated to the U.S. economy and a symmetric twin.
4.4	G3_CW03	Coenen and Wieland (2002) model of USA, Euro Area and Japan
4.5	G7_TAY93	Taylor (1993) model of G7 economies
4.6	GPM6_IMF13	IMF global projection model with 6 regions Carabenciov et al. (2013)
4.7	EACZ_GEM03	Laxton and Pesenti (2003) model calibrated to Euro Area and Czech republic
4.8	EAES_RA09	Rabanal (2009)
4.9	EAUS_NAWM08	Coenen et al. (2008), New Area Wide model of Euro Area and USA
4.10 ¹	EAUS_NAWMctww	Cogan et al. (2013)
5. ESTIMATED MODELS OF OTHER COUNTRIES (9 MODELS)		
5.1	BRA_SAMBA08	Gouvea et al. (2008), model of the Brazilian economy
5.2	CA_BMZ12	Bailliu et al. (2012)
5.3	CA_LS07	Lubik and Schorfheide (2007), small-scale open-economy model of the Canadian economy
5.4 ¹	CA_TOTEM10	Murchison and Rennison (2006), Terms of Trade Economic Model of Canada
5.5	CL_MS07	Medina and Soto (2007), model of the Chilean economy
5.6	FI_AINO16	Kilponen et al. (2016), the AINO II model
5.7 ¹	HK_FPP11	Funke et al. (2011), open-economy model of the Hong Kong economy
5.8	HK_FP13	Funke and Paetz (2013), open-economy model of the Hong Kong economy
5.9	UK_SM11	Millard (2011), open-economy model of the United Kingdom with energy
6. ADAPTIVE LEARNING MODELS (11 MODELS)		
6.1 ¹	NK_BGG99AL	Adaptive learning version of Bernanke et al. (1999)
6.2 ¹	NK_CGG99AL	Adaptive learning version of Clarida et al. (1999)
6.3 ¹	NK_CGG02AL	Adaptive learning version of Clarida et al. (2002)
6.4 ¹	NK_IR04AL	Adaptive learning version of Ireland (2004)
6.5 ¹	NK_LWW03AL	Adaptive learning version of Levin et al. (2003)
6.6 ¹	NK_RW97AL	Adaptive learning version of Rotemberg and Woodford (1997)
6.7 ¹	NK_RW06AL	Adaptive learning version of Ravenna and Walsh (2006)
6.8 ¹	US_FM95AL	Adaptive learning version of Fuhrer and Moore (1995)
6.9 ¹	US_MI07AL	Milani (2007)
6.10 ¹	US_SW07AL	Slobodyan and Wouters (2012)
6.11 ¹	US_YR13AL	Rychalovska (2016)

¹ For several models that are implemented in the MMB, there is currently no replication package available for download. These models are: NK_CGG99, NK_CGG02, NK_CK08, NK_CKL09, NK_LWW03, NK_MCN99cr, NK_RW06, NK_RW97, US_FRB08, US_MI07, US_PM08, US_OR03, US_RS99, US_VMDno, US_VMDop, US_YR13, EA_CKL09, EAUS_NAWMctww, HL_FPP11, NK_BGG99AL, NK_CGG99AL, NK_CGG02AL, NK_IR04AL, NK_LWW03AL, NK_RW97AL, NK_RW06AL, US_FM96AL, US_MI07AL, US_SW07AL, and US_YR13AL.

² Solving this model requires the MATLAB Optimization Toolbox.

³ Solving these models requires the Statistics Toolbox for MATLAB or the statistics and io package for Octave, respectively.

References

- Adolfson, M., Laseen, S., Linde, J., Villani, M., 2007. Bayesian estimation of an open economy DSGE model with incomplete pass-through. *Journal of International Economics* 72, 481–511.
- Ajello, A., 2016. Financial intermediation, investment dynamics, and business cycle fluctuations. *American Economic Review* 106, 2256–2303.
- Altig, D.E., Christiano, L.J., Eichenbaum, M., Linde, J., 2005. Firm-specific capital, nominal rigidities and the business cycle. *CEPR Discussion Papers* 4858.
- Andrés, J., López-Salido, J.D., Vallés, J., 2006. Money in an estimated business cycle model of the euro area. *Economic Journal* 116, 457–477.
- Angeloni, I., Faia, E., Lo Duca, M., 2015. Monetary policy and risk taking. *Journal of Economic Dynamics & Control* 52, 285–307.
- Bailliu, J., Meh, C., Zhang, Y., 2012. Macroprudential rules and monetary policy when financial frictions matter. *Bank of Canada Working Paper* 2012-6 .
- Balke, N.S., Brown, S.P., 2018. Oil supply shocks and the us economy: An estimated dsge model. *Energy policy* 116, 357–372.
- Benchimol, J., 2015. Money in the production function: A new keynesian dsge perspective. *Southern Economic Journal* 82, 152–184.
- Benchimol, J., Fourçans, A., 2017. Money and monetary policy in the eurozone: An empirical analysis during crises. *Macroeconomic Dynamics* 21, 677–707.
- Bernanke, B., Gertler, M., Gilchrist, S., 1999. The financial accelerator in a quantitative business cycles framework, in: Taylor, J.B., Woodford, M. (Eds.), *Handbook of Macroeconomics Volume 1C*. Amsterdam: Elsevier Science, North-Holland, pp. 1341–1393.
- Bils, M., Klenow, P.J., Malin, B.A., 2012. Reset price inflation and the impact of monetary policy shocks. *American Economic Review* 102, 2798–2825.
- Blanchard, O., Galí, J., 2010. Labor markets and monetary policy: A new keynesian model with unemployment. *American Economic Journal: Macroeconomics* 2, 1–30.
- Brayton, F., Laubach, T., 2008. Documentation of linearized FRB/US. This is a note to switch of the warning.
- Brayton, F., Reifschneider, D., 2022. Linver: The linear version of frb/us .
- Carabenciov, I., Ermolaev, I., Freedman, C., Juillard, M., Kamenik, O., Korshunov, D., Laxton, D., 2008. A small quarterly projection model of the US economy. *IMF Working Paper* 08/278.
- Carabenciov, I., Freedman, C., Garcia-Saltos, R., Laxton, D., Kamenik, O., Manchev, P., 2013. Gpm6 - the global projection model with 6 regions. *IMF Working Paper* 13/87 .
- Carlstrom, C.T., Fuerst, T.S., Ortiz, A., Paustian, M., 2014. Estimating contract indexation in a financial accelerator model. *Journal of Economic Dynamics & Control* 46, 130–194.
- Carlstrom, C.T., Fuerst, T.S., Paustian, M., 2010. Optimal monetary policy in a model with agency costs. *Journal of Money, credit and Banking* 42, 37–70.
- Carlstrom, C.T., Fuerst, T.S., Paustian, M., 2017. Targeting long rates in a model with segmented markets. *American Economic Journal: Macroeconomics* 9, 205–42.
- Chan, J., Diz, S., Kanngiesser, D., 2024. Energy prices and household heterogeneity: Monetary policy in a gas-tank. *Journal of Monetary Economics* , 103620.
- Chen, H., Cúrdia, V., Ferrero, A., 2012. The macroeconomic effects of large-scale asset purchase programmes. *The economic journal* 122, F289–F315.
- Christensen, I., Dib, A., 2008. The financial accelerator in an estimated New Keynesian model. *Review of Economic Dynamics* 11, 155–178.
- Christiano, L., Motto, R., Rostagno, M., 2010. Financial factors in economic fluctuations. *Working Paper Series* 1192. European Central Bank. URL: <http://ideas.repec.org/p/ecb/ecbwps/20101192.html>.
- Christiano, L.J., Eichenbaum, M.S., Trabandt, M., 2015. Understanding the great recession. *American Economic Journal: Macroeconomics* 7, 110–167.
- Christiano, L.J., Motto, R., Rostagno, M., 2014. Risk shocks. *American Economic Review* 104, 27–65.

- Christoffel, K., Kuester, K., 2008. Resuscitating the wage channel in models with unemployment fluctuations. *Journal of Monetary Economics* 55, 865–887.
- Christoffel, K., Kuester, K., Linzert, T., 2009. The role of labor markets for euro area monetary policy. *European Economic Review* 53, 908–936.
- Clarida, R., Galí, J., Gertler, M., 1999. The science of monetary policy: A New Keynesian perspective. *Journal of Economic Literature* 37(4), 1661–1707.
- Clarida, R., Galí, J., Gertler, M., 2002. A simple framework for international monetary policy analysis. *Journal of Monetary Economics* 49, 879–904.
- Coenen, G., McAdam, P., Straub, R., 2008. Tax reform and labour-market performance in the euro area: A simulation-based analysis using the New Area-Wide Model. *Journal of Economic Dynamics & Control* 32(8), 2543–2583.
- Coenen, G., Wieland, V., 2002. Inflation dynamics and international linkages: A model of the United States, the Euro Area and Japan. ECB Working Paper Series 181.
- Coenen, G., Wieland, V., 2005. A small estimated euro area model with rational expectations and nominal rigidities. *European Economic Review* 49, 1081–1104.
- Cogan, J., Cwik, T., Taylor, J., Wieland, V., 2010. New keynesian versus old keynesian government spending multipliers. *Journal of Economic Dynamics and Control* 34, 281–295.
- Cogan, J., Taylor, J., Wieland, V., Wolters, M., 2013. Fiscal consolidation strategy. *Journal of Economic Dynamics and Control* 37, 404–421.
- Cogley, T., Primiceri, G.E., Sargent, T.J., 2010. Inflation-gap persistence in the us. *American Economic Journal: Macroeconomics* 2, 43–66.
- Curdia, V., Woodford, M., 2009. Credit frictions and optimal monetary policy. BIS Working Paper No 278 .
- Darracq Paries, M., Kokk Sorensen, C., Rodriguez-Palenzuela, D., 2011. Macroeconomic propagation under different regulatory regimes: Evidence from an estimated dsge model for the euro area. *International Journal of Central Banking* 7.
- De Fiore, F., Teles, P., Tristani, O., 2011. Monetary policy and the financing of firms. *American Economic Journal: Macroeconomics* 3, 112–142.
- De Fiore, F., Tristani, O., 2013. Optimal monetary policy in a model of the credit channel. *The Economic Journal* 123, 906–931.
- De Graeve, F., 2008. The external finance premium and the macroeconomy: US post-WWII evidence. *Journal of Economic Dynamics and Control* 32, 3415–3440.
- Del Negro, M., Eggertsson, G., Ferrero, A., Kiyotaki, N., 2017. The great escape? a quantitative evaluation of the fed’s liquidity facilities. *American Economic Review* 107, 824–57.
- Del Negro, M., Giannoni, M.P., Schorfheide, F., 2015. Inflation in the great recession and new keynesian models. *American Economic Journal: Macroeconomics* 7, 168–96.
- Dieppe, A., Kuester, K., McAdam, P., 2005. Optimal monetary policy rules for the euro area: An analysis using the area wide model. *Journal of Common Market Studies* 43, 507–5372.
- Ellison, M., Tischbirek, A., 2014. Unconventional government debt purchases as a supplement to conventional monetary policy. *Journal of Economic Dynamics and Control* 43, 199 – 217.
- Erceg, C.J., Guerrieri, L., Gust, C., 2008. Trade adjustment and the composition of trade. *Journal of Economic Dynamics & Control* 32, 2622–2650.
- Fernández-Villaverde, J., 2010. The econometrics of dsge models. *SERIEs* 1, 3–49.
- Fernández-Villaverde, J., Guerrón-Quintana, P., Kuester, K., Rubio-Ramírez, J., 2015. Fiscal volatility shocks and economic activity. *American Economic Review* 105(11), 3352–3384.
- Fernández-Villaverde, J., Guerrón-Quintana, P., Rubio-Ramírez, J.F., 2015. Estimating dynamic equilibrium models with stochastic volatility. *Journal of Econometrics* 185, 216–229.
- Ferrari, A., Nispi Landi, V., 2023. Toward a green economy: The role of the central bank’s asset purchases. *International Journal of Central Banking* .
- Fève, P., Matheron, J., Sahuc, J.G., 2013. A pitfall with estimated dsge-based government spending multipliers. *American Economic Journal: Macroeconomics* 4, 141–178.
- Filardo, A., Lombardi, M., Montoro, C., Ferrari, M., 2018. Monetary policy spillovers, global commodity prices and

- cooperation. BIS Working Paper No 696 .
- Fratto, C., Uhlig, H., . The great escape? a quantitative evaluation of the fed's liquidity facilities. *Review of Economic Dynamics*, forthcoming .
- Fuhrer, J.C., Moore, G., 1995. Inflation persistence. *The Quarterly Journal of Economics* 110(1), 127–159.
- Funke, M., Paetz, M., 2013. Housing prices and the business cycle: An empirical application to hong kong. *Journal of Housing Economics* 22, 62–76.
- Funke, M., Paetz, M., Pytlarczyk, E., 2011. Stock market wealth effects in an estimated DSGE model for Hong Kong. *Economic Modelling* 28, 316–334.
- Gadatsch, N., Hauzenberger, K., Stähler, N., 2016. Fiscal policy during the crisis: A look on germany and the euro area with gear. *Economic Modelling* 52, 997–1016.
- Galí, J., López-Salido, J.D., Vallés, J., 2007. Understanding the effects of government spending on consumption. *Journal of the European Economic Association* 5, 227–270.
- Galí, J., Monacelli, T., 2005. Monetary policy and exchange rate volatility in a small open economy. *Review of Economic Studies* 72, 707–734.
- Galí, J., Monacelli, T., 2016. Understanding the gains from wage flexibility: The exchange rate connection. *American Economic Review* 106, 3829–68.
- Gambacorta, L., Signoretti, F., 2014. Should monetary policy lean against the wind? *Journal of Economic Dynamics and Control* .
- Gelain, P., 2010. The external finance premium in the euro area: A dynamic stochastic general equilibrium analysis. *North American Journal of Economics and Finance* 21, 49–71.
- Gerali, A., Neri, S., Sessa, L., Signoretti, F.M., 2010. Credit and banking in a dsge model of the euro area. *Journal of Money, Credit and Banking* 42, 107–141. URL: <http://ideas.repec.org/a/mcb/jmoncb/v42y2010is1p107-141.html>.
- Gertler, M., Karadi, P., 2011. A model of unconventional monetary policy. *Journal of Monetary Economics* 58, 17–34.
- Gertler, M., Karadi, P., 2013. Qe 1 vs. 2 vs. 3. . . : A framework for analyzing large-scale asset purchases as a monetary policy tool. *International Journal of Central Banking* 9.
- Gilchrist, S., Schoenle, R., Sim, J., Zakrajšek, E., 2017. Inflation dynamics during the financial crisis. *American Economic Review* 107, 785–823.
- Gnocco, S., Hauser, D., Pappa, E., 2016. Housework and fiscal expansions. *Journal of Monetary Economics* 79, 94–108.
- Goodfriend, M., McCallum, B.T., 2007. Banking and interest rates in monetary policy analysis: A quantitative exploration. *Journal of Monetary Economics* 54, 1480–1507.
- Gouvea, S., Minella, A., Santos, R., Souza-Sobrinho, N., 2008. Samba: Stochastic analytical model with a bayesian approach. Manuscript.
- Hollander, H., Liu, G., 2016. The equity price channel in a new-keynesian dsge model with financial frictions and banking. *Economic Modelling* 52, 375–389.
- Iacoviello, M., 2005. House prices, borrowing constraints, and monetary policy in the business cycle. *The American Economic Review* 95(3), 739–764.
- Iacoviello, M., Neri, S., 2010. Housing market spillovers: Evidence from an estimated dsge model. *American Economic Journal: Macroeconomics* 2, 125–64.
- Ireland, P., 2004. Money's role in the monetary business cycle. *Journal of Money, Credit and Banking* 36(6), 969–983.
- Ireland, P., 2011. A New Keynesian perspective on the Great Recession. *Journal of Money, Credit and Banking* 43(1), 31–54.
- Ireland, P.N., 2015. Monetary policy, bond risk premia, and the economy. *Journal of Monetary Economics* 76, 124–140.
- Jang, T.S., Okano, E., 2015. Productivity shocks and monetary policy in a two-country model. *Frontiers of Economics in China, Higher Education Press* 10, 7–37.
- Justiniano, A., Primiceri, G.E., Tambalotti, A., 2011. Investment shocks and the relative price of investment. *Review of Economic Dynamics* 14, 102–121.
- Kannan, P., Rabanal, P., Scott, A.M., 2012. Monetary and macroprudential policy rules in a model with house price booms. *The B.E. Journal of Macroeconomics* 12, 16.

- Kilponen, J., Orjasniemi, S., Ripatti, A., Verona, F., 2016. The aino 2.0 model. Bank of Finland Research Discussion Paper 16 .
- Kirchner, M., van Wijnbergen, S., 2016. Fiscal deficits, financial fragility, and the effectiveness of government policies. *Journal of Monetary Economics* 80, 51–68.
- Kliem, M., Kriwoluzky, A., 2014. Toward a taylor rule of fiscal policy. *Review of Economic Dynamics* 17, 294–302.
- Krause, M.U., Moyen, S., 2016. Public debt and changing inflation targets. *American Economic Journal: Macroeconomics* 8, 142–76.
- Kriwoluzky, A., Stoltenberg, C.A., 2014. Monetary policy and the transaction role of money in the us. *economic journal. Economic Journal* 125, 1452–1473.
- Laxton, D., Pesenti, P., 2003. Monetary rule for small, open, emerging economies. *Journal of Monetary Economics* 50, 1109–1146.
- Leeper, E.M., Traum, N., Walker, T.B., 2017. Clearing up the fiscal multiplier morass. *American Economic Review* 107, 2409–2454.
- Leeper, E.M., Walker, T.B., Yang, S.C.S., 2013. Fiscal foresight and information flows. *Econometrica* 81, 1115–1145.
- Levin, A., Wieland, V., Williams, J.C., 2003. The performance of forecast-based monetary policy rules under model uncertainty. *The American Economic Review* 93(3), 622–645.
- Lubik, T.A., Schorfheide, F., 2007. Do central banks respond to exchange rate movements? a structural investigation. *Journal of Monetary Economics* 54, 1069–1087.
- Mankiw, N.G., Reis, R., 2007. Sticky information in general equilibrium. *Journal of the European Economic Association* 5(2-3), 603–613.
- McCallum, B., Nelson, E., 1999. Performance of operational policy rules in an estimated semi-classical structural model, in: Taylor, J.B. (Ed.), *Monetary Policy Rules*. Chicago: University of Chicago Press, pp. 15–56.
- Medina, J.P., Soto, C., 2007. The Chilean business cycles through the lens of a stochastic general equilibrium model. *Central Bank of Chile Working Papers* 457.
- Meh, C.A., Moran, K., 2010. The role of bank capital in the propagation of shocks. *Journal of Economic Dynamics and Control* 34, 555–576.
- Michaillat, P., 2014. A theory of countercyclical government multiplier. *American Economic Journal: Macroeconomics* 6, 190–217.
- Milani, F., 2007. Expectations, learning and macroeconomic persistence. *Journal of Monetary Economics* 54, 2065 – 2082.
- Millard, S., 2011. An estimated dsge model of energy, costs and inflation in the united kingdom .
- Monacelli, T., Perotti, R., Trigari, A., 2010. Unemployment fiscal multipliers. *Journal of Monetary Economics* 57, 531–553.
- Murchison, S., Rennison, A., 2006. Totem: The bank of canada's new quarterly projection model. Bank of Canada Technical Report No. 97 .
- Nakamura, E., Steinsson, J., 2014. Fiscal stimulus in a monetary union: Evidence from us regions. *American Economic Review* 4, 753–792.
- Orphanides, A., 2003. The quest for prosperity without inflation. *Journal of Monetary Economics* 50, 633–663.
- Orphanides, A., Wieland, V., 1998. Price stability and monetary policy effectiveness when nominal interest rates are bounded at zero. *Finance and Economics Discussion Series 98-35*, Board of Governors of the Federal Reserve System.
- Pancrazi, R., Seoane, H.D., Vukotic, M., 2016. The price of capital and the financial accelerator. *Economics Letters* 149, 86–89.
- Paoli, B.d., Paustian, M., 2017. Coordinating monetary and macroprudential policies. *Journal of Money, Credit and Banking* 49, 319–349.
- Poutineau, J.C., Vermandel, G., 2015a. Cross-border banking flows spillovers in the eurozone: Evidence from an estimated dsge model. *Journal of Economic Dynamics and Control* 51, 378–403.
- Poutineau, J.C., Vermandel, G., 2015b. Financial frictions and the extensive margin of activity. *Research in Economics* 69, 525–554.

- Priftis, R., Vogel, L., 2016. The portfolio balance mechanism and QE in the euro area. *Manchester School*, University of Manchester 84, 84–105.
- Priftis, R., Vogel, L., 2017. The macroeconomic effects of the ECB's evolving QE programme: a model-based analysis. *Open Economies Review* 28, 823–845.
- Quint, D., Rabanal, P., 2014. Monetary and Macroprudential Policy in an Estimated DSGE Model of the Euro Area. *International Journal of Central Banking*, *International Journal of Central Banking* 10, 169–236.
- Rabanal, P., 2007. Does inflation increase after a monetary policy tightening? answers based on a estimated DSGE model. *Journal of Economic Dynamics & Control* 31, 906–937.
- Rabanal, P., 2009. Inflation differentials between Spain and the EMU: A DSGE perspective. *Journal of Money, Credit and Banking* 41(6), 1141–1166.
- Rannenberg, A., 2016. Bank leverage cycles and the external finance premium. *Journal of Money, Credit and Banking* 48, 1569–1612.
- Ratto, M., Roeger, W., in 't Veld, J., 2009. QUEST III: An estimated open-economy DSGE model of the euro area with fiscal and monetary policy. *Economic Modelling* 26(1), 222–233.
- Ravenna, F., Walsh, C.E., 2006. Optimal monetary policy with the cost channel. *Journal of Monetary Economics* 53(2), 199–216.
- Reis, R., 2009. A sticky-information general-equilibrium model for policy analysis. Technical Report. National Bureau of Economic Research.
- Rotemberg, J.J., Woodford, M., 1997. An optimization-based econometric framework for the evaluation of monetary policy. *NBER Macroeconomics Annual* 12, 297–346.
- Rudebusch, G.D., Svensson, L.E.O., 1999. Policy rules for inflation targeting, in: Taylor, J.B. (Ed.), *Monetary Policy Rules*. Chicago: University of Chicago Press, pp. 203–262.
- Rychalovska, Y., 2016. The implications of financial frictions and imperfect knowledge in the estimated dsge model of the u.s. economy. *Journal of Economic Dynamics and Control* 73, 259 – 282.
- Slobodyan, S., Wouters, R., 2012. Learning in an estimated medium-scale DSGE model. *Journal of Economic Dynamics and Control* 36, 26–46. URL: <https://ideas.repec.org/a/eee/dyncon/v36y2012i1p26-46.html>, doi:10.1016/j.jedc.2011.01.01.
- Smets, F., Warne, A., Wouters, R., 2014. Professional forecasters and real-time forecasting with a dsge model. *International Journal of Forecasting* 30, 981–995.
- Smets, F., Wouters, R., 2003. An estimated dynamic stochastic general equilibrium model of the euro area. *Journal of the European Economic Association* 1 (5), 1123–1175.
- Smets, F., Wouters, R., 2007. Shocks and frictions in US business cycles: A bayesian DSGE approach. *The American Economic Review* 97(3), 586–606.
- Stähler, N., Thomas, C., 2012. Fimod—a dsge model for fiscal policy simulations. *Economic modelling* 29, 239–261.
- Stracca, L., 2013. Inside money in general equilibrium: Does it matter for monetary policy? *Macroeconomic Dynamics* 17, 563–590.
- Taylor, J.B., 1993. *Macroeconomic Policy in a World Economy*. W.W. Norton, New York. Online Edition available on: <http://www.stanford.edu/johntayl/MacroPolicyWorld.htm>.
- Taylor, J.B., Wieland, V., 2011. Surprising comparative properties of monetary models: Results from a new data base. *Review of Economics and Statistics* forthcoming.
- Verona, F., Martins, M.M.F., Drumond, I., 2013. (un)anticipated monetary policy in a dsge model with a shadow banking system. *International Journal of Central Banking* 9, 78–124.
- Villa, S., 2016. Financial frictions in the euro area and the united states: A bayesian assessment. *Macroeconomic Dynamics* 20, 1313–1340.