Appendix to "The Origins of Persistent Current Account Imbalances in the post-Bretton Woods Era"

Mark Manger
University of Toronto
mark.manger@utoronto.ca

Thomas Sattler
Université de Genève
thomas.sattler@unige.ch

May 7, 2019

A1 The Current Account and the Trade Balance

Recall that GDP is defined as $Y = C + G + I + (X - M)$ where

Table A1: Notation

Y	GDP
C	Consumption
S^P	Private Savings
S^G	Government Savings
I	Investment
X	Exports
I	Imports
R	Change in official reserves

In a closed economy, investment is defined as $I = GDP - C - G$. Any output not sold to willing buyers in the marketplace becomes inventory investment, and savings must equal investment ($S = I$). In an open economy, GNP is GDP plus net investment income ($NINV$), since some domestic GDP is produced by foreign capital, so that $GNP = GDP + NINV$. Savings is defined as $S = GNP - C - G$. The current account can therefore be expressed as

$$\begin{aligned} CA &= (X - M) + R && (1)\\ &= Y - C - G - I - R && (2)\\ &= (Y - T - C) + (T - G) - I + R && (3)\\ &= S^P + S^G - I + R && (4) \end{aligned}$$

Hence we can express the current (CA) alternatively as $CA = S - I$ or as $CA = X - M + NINV + NUT$, where X is exports and M is imports and NUT are net unilateral transfers (aid payments, remittances and such). We focus on the latter definition that is standard in economics textbooks (e.g. Krugman & Obstfeld, 1997).

Several articles have recently pointed out that current account imbalances may be less than meets the eye when considering that some countries with sizeable surpluses are producers of final goods, but import a lot of intermediate goods from apparent deficit countries. For example, the *bilateral* trade imbalance between the United States and China is about 30-40% smaller in value added than in gross terms, while the German and Japanese bilateral trade surplus with the United States is about 16% and 20% greater, respectively (Johnson & Noguera, 2012). It is crucial, however, that the *multilateral* trade balances that we investigate in this paper are identical in gross and value-added terms. To see this, recall that $C + I + G$, or final expenditure, is calculated as total spending and therefore includes all value added, whether produced domestically or imported. Y, is total value added domestically.

$$Y - (C + I + G) = X - M \quad (5)$$

If p and q are the final sale price and quantity of each good i, and v and s are price and quantity of each intermediate good, then GDP at producer prices calculated by the output approach is

$$Y = \sum(p_i q_i) - \sum(v_i s_i) - \text{ taxes on products and imports} + \text{ subsidies} \tag{6}$$

Accordingly, total value produced minus total value consumed is equal to the trade balance (Johnson, 2014, 132).

A2 Data Sources

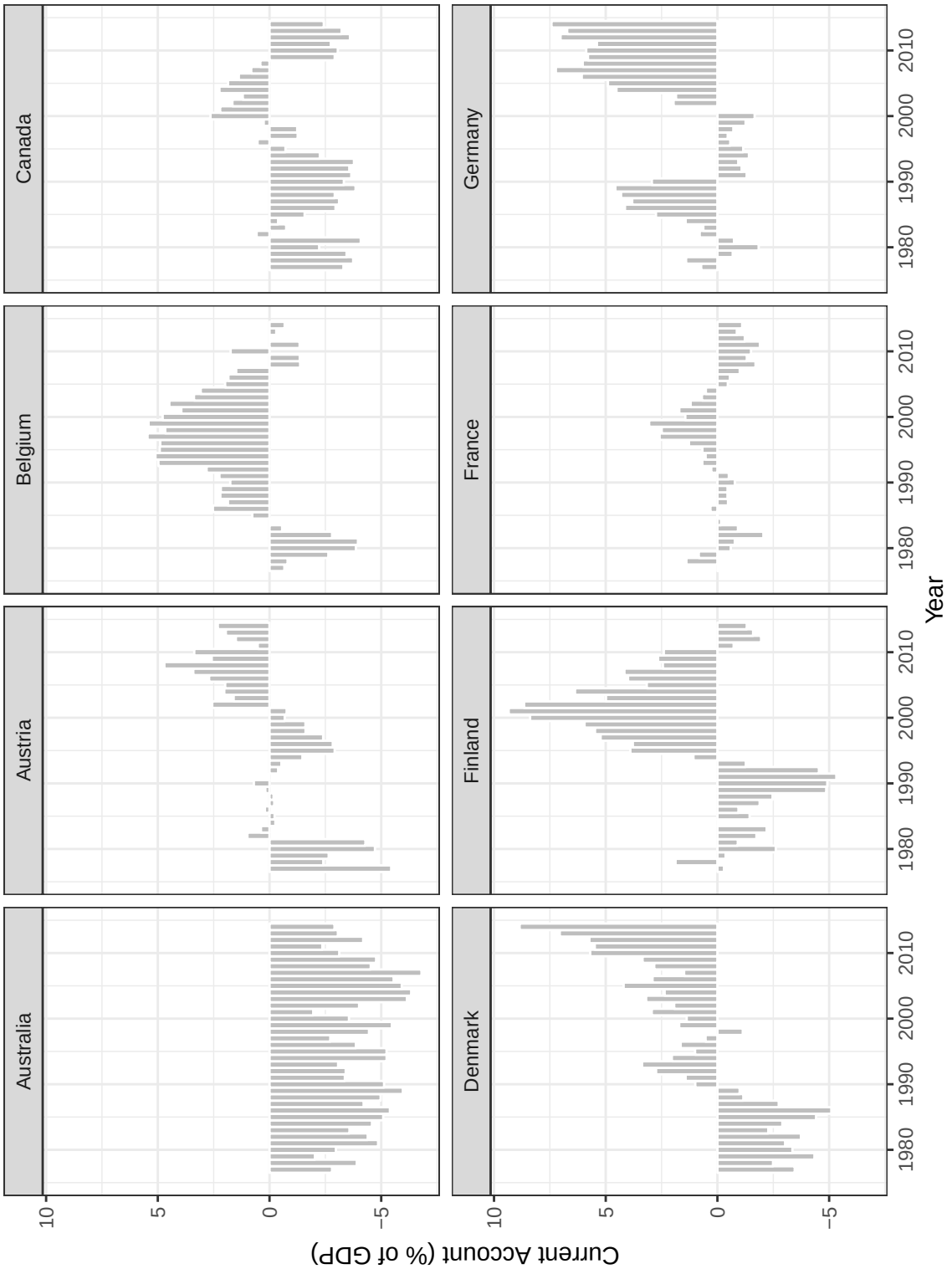
Table A2: Data Sources

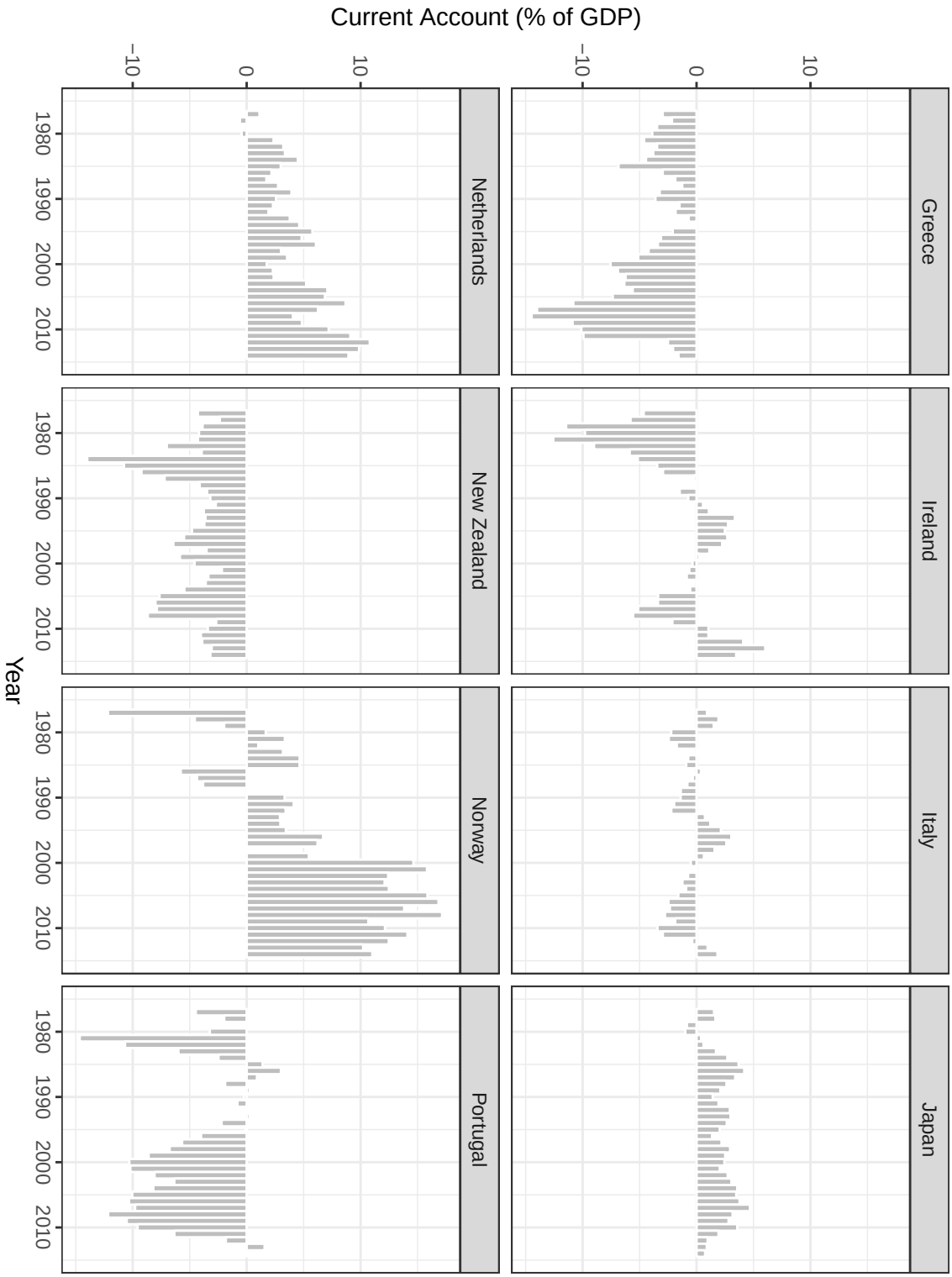
Current account and trade balance	IMF BOP Statistics
Coordination	Visser 2015
Fiscal balance	OECD iLibrary
Stock market capitalization	World Development Indicators
Financial intermediation	OECD National Accounts
Old	World Development Indicators
Young	World Development Indicators
GDP per capita	OECD national accounts
Growth	OECD national accounts
Terms of Trade	World Development Indicators
Credit to GDP	World Development Indicators
KA openness	Chinn-Ito 2016
Original Sin	Bank for International Settlements, International Debt Securities Statistics
Fuel exports	World Development Indicators

Table A3: Summary statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Trade balance	1.242	5.087	-20.763	31.748	817
Current account	-0.018	4.641	-14.652	17.152	817
Coordination	3.131	1.125	1	4.538	817
Coordination (1975)	3.623	1.289	1	5	817
Fixed exchange rate	0.375	0.484	0	1	817
Euro	0.226	0.419	0	1	817
Net foreign assets	0	42.066	-148.169	153.715	817
Fiscal balance	0	4.618	-29.296	21.529	817
Stock market capitalization	0	49.174	-51.042	240.615	817
Financial intermediation	0	1.609	-3.694	6.637	817
Dependency ratio (old)	0	4.388	-9.868	21.081	817
Dependency ratio (young)	0	5.574	-9.255	24.425	817
GDP per capita	0	10.227	-20.938	34.712	817
Growth	0	3.167	-12.799	12.278	817
Terms of Trade	0	5.039	-24.497	35.788	817
Domestic Credit	0	7.523	-44.556	96.066	817
Capital account openness	0	1.075	-3.597	0.779	817
Fuel exports as share of GDP	0	12.341	-8.271	61.64	817
Original Sin	0	2.704	-2.164	7.616	817

A3 Current Accounts by Country, 1977–2015




Current Account (% of GDP)
Greece
Ireland
Italy
Japan
Netherlands
New Zealand
Norway
Portugal
10
0
−10
1980
1990
2000
2010
Year

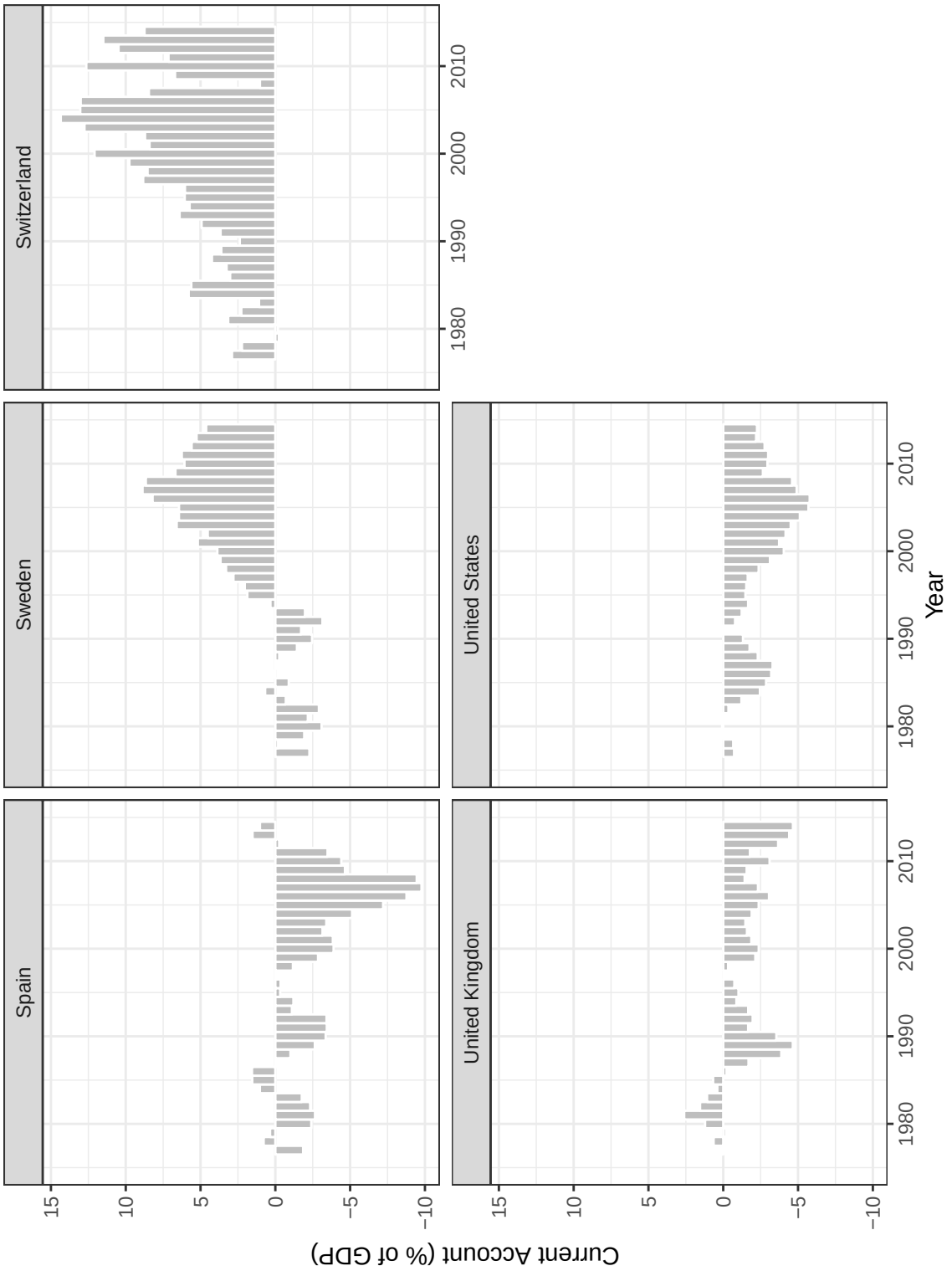


Figure A1: Current Account balances, 1977-2015

A4 Wage and Unit Labor Cost Divergence

To illustrate the different trajectories of countries depending on whether they have strong or weak wage bargaining coordination regimes, we split our country sample at the mean, and group countries according to whether their mean coordination score lies above or below. The strong coordination group comprises Austria, Belgium, Denmark, Finland, Germany, Greece, Ireland, Japan, Netherlands, Norway, Sweden and Switzerland. The weak coordination group consists of Australia, Canada, France, Italy, Spain, Portugal, the United Kingdom and the United States of America. As all of these values are indexes, they are not suitable as dependent variables in a panel econometric approach but help to illustrate comparative trends.

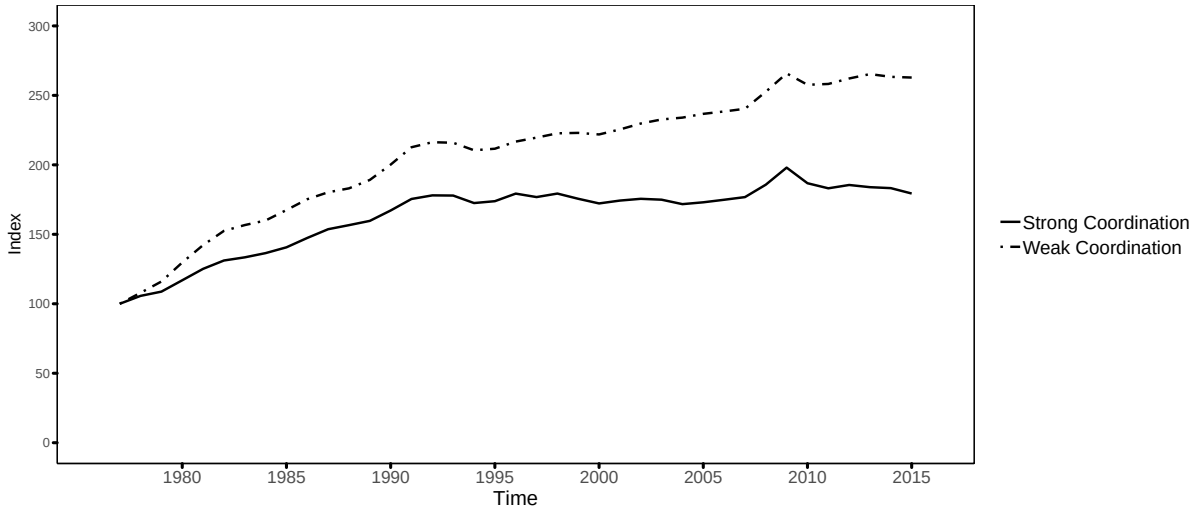


Figure A2: Unit Labor Cost in Manufacturing by country groups, 1977 = 100

In line with our theory, we find that unit labor costs (the wage cost component of a unit of output) have increased faster in countries with weak wage bargaining coordination, in particular in the (largely tradable) manufacturing sector, as shown in Figure A2. The difference is not nearly as stark when we compare unit labor costs in the total economy, with a much larger component of non-tradables, as displayed in Figure A3.

Accordingly, inflation rates in the total economy that are influenced by overall price increases in the economy but not by the prices of exported goods have converged over time, as figure A4 shows.

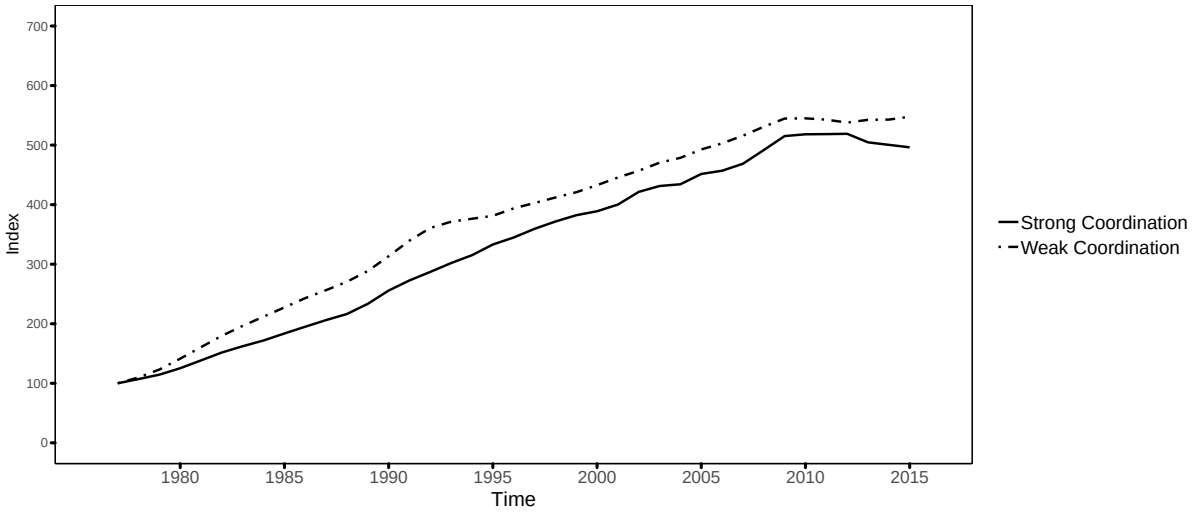


Figure A3: Unit Labor Cost in Manufacturing by country groups, 1977 = 100

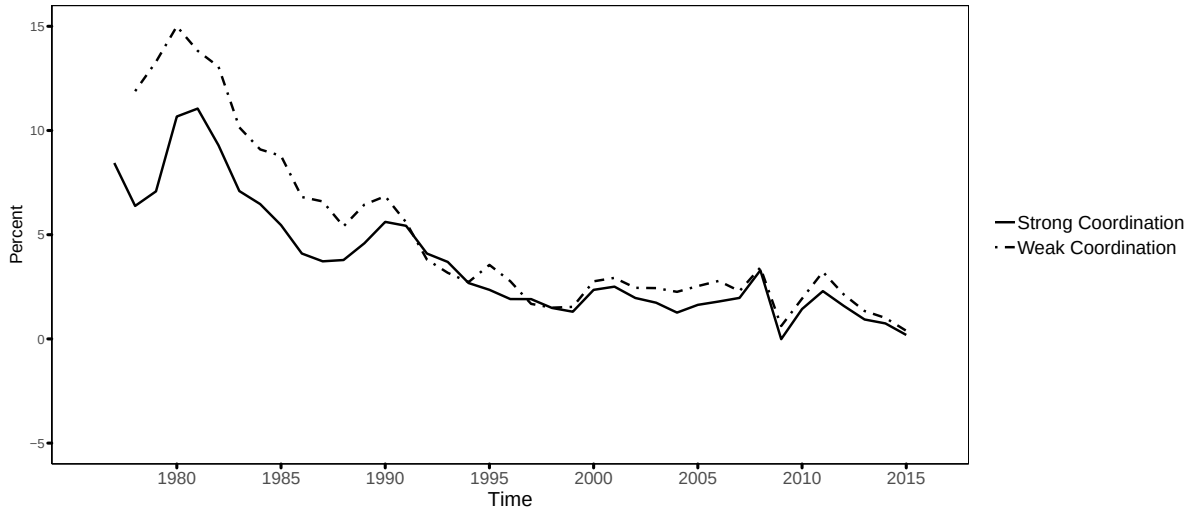


Figure A4: Annual inflation rates by country groups, 1977–2015

Finally, it is interesting to compare the prevalence of low pay, defined as the share of full-time workers earning less than two-thirds of gross median earnings of all full-time workers, in the two country groups. This matters as some authors (e.g. Dustmann, Fitzenberger, Schönberg, & Spitz-Oener, 2014) have argued that Germany's Hartz Reforms have boosted current account surpluses by stimulating the creation of a low-wage sector and suppressing consumption. At the same time, wage restraint in the US and the UK could well have encouraged export competitiveness. Contrary to these expectations, Figure A5 shows that low pay has become much more prevalent in countries with weakly coordinated wage bargaining. Accordingly, it is unlikely that low-wage sector growth has increased surpluses or made countries more export competitive.

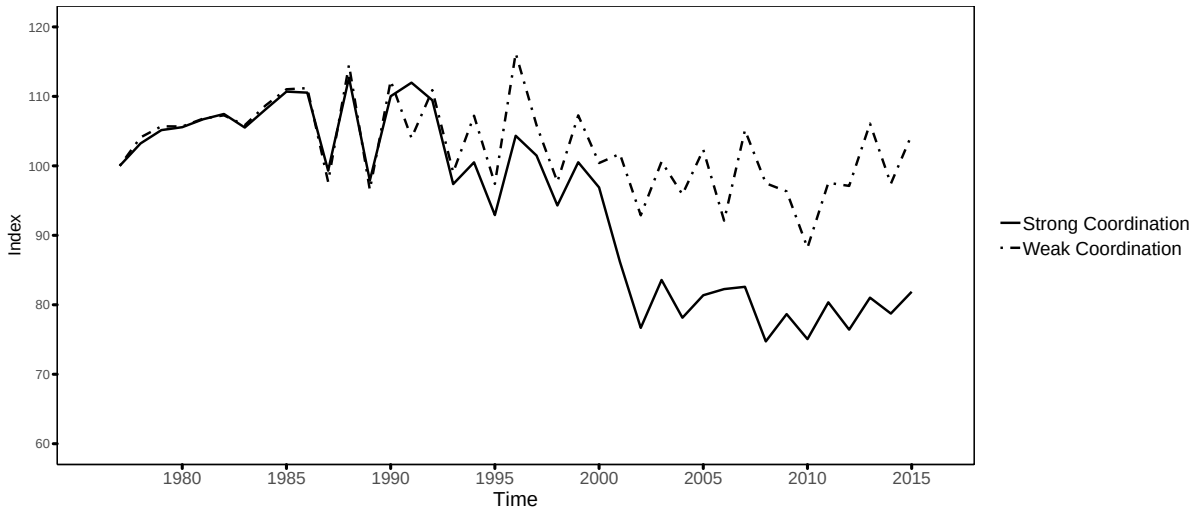


Figure A5: Low pay index by country groups, 1977 = 100

A5 Economic Analyses of the Current Account

Commensurate with the importance of the current account in the toolkit of macroeconomics, there is a large literature on global imbalances. Since much of it is focused on short- to medium-term changes, most of it is not directly pertinent to our argument. We review it here briefly for interested readers. We can identify four relevant strands of economic literature on current accounts: The twin deficits argument, the savings glut as a consequence of reserve hoarding by emerging markets, the financial deepening hypothesis, and the rigorous (but rarely empirically explored) intertemporal approach.

Twin deficits. The "twin deficits" hypothesis originated in the Reagan era, when a defence build-up coincided with tax cuts, causing large public deficits and ballooning current account deficits to coincide (Volcker, 1987). Research has found some empirical validation of this view for the 1980s and 2001-2004 (Chinn, 2005). Nonetheless, such shocks can by definition not explain persistent imbalances, since some countries with current account surpluses have nonetheless run sizeable government deficits over many years, as the case of Japan shows.

A global savings glut. Since the late 1990s, many developing countries have accumulated large holdings of foreign reserves. This has raised the question whether the policies driving this outcome are primarily export-promotion through undervaluation–with reserves as a byproduct– or if reserves themselves are the objective. The former view sees the current account surpluses of East Asian countries as a tacit bargain whereby these countries finance the current account deficits in the United States to maintain demand there (Dooley, Folkerts-Landau, & Garber, 2003, 2009). The latter view argues that in reaction to the frequent current and capital account crises of the 1990s and in particular the 1998 Asian Financial Crisis, emerging markets have decisively switched from pegs and overvalued currencies to considerable intervention in the foreign exchange market. Foreign reserves are therefore a policy of self-insurance (Aizenman & Lee, 2008; Gruber & Kamin, 2007; Jeanne & Rancière, 2008). Either way, the result is a glut of savings and depressed real interest rates in the deficit countries (Bernanke, 2005).[1] Among OECD countries, however, imbalances predate the 1990s financial crises, and few countries accumulate significant reserves, so that this explanation seems limited.

Insufficient financial deepening. A variation on this argument revolves around financial market imperfections, as originally proposed by Lucas (1990). While people in fast-growing emerging markets seek a safe store of value, investment opportunities are either not keeping up with savings or financial market imperfections make them appear unattractive because of associated risks (Mendoza, Quadrini, & Ríos-Rull, 2009). In consequence, capital flows to the US and other locations that produce safe assets (Caballero, 2006; Caballero, Farhi, & Gourinchas, 2008; Caballero & Krishnamurthy, 2009). With high legal uncertainty and expropriation risk, developing countries may therefore experience large private capital outflows and (in comparison) modest inflows of foreign direct investment (Ju & Wei, 2006). We submit that this explanation is particularly relevant for e.g. the Chinese case, but less so for OECD countries with generally deep financial markets.

Asset price distortions. Several recent contributions underscore the distorting effects of low interest rates, and show how asset bubbles interact with political institutions and preferences. Ansell (2014) and Ansell and Broz (2013) find that as house prices rise, voters demand less social insur-

[1] Despite criticism from many sides (Obstfeld, 2010) that US monetary policy was accordingly too lax, policymakers disavow any responsibility (Bernanke, 2010).

ance in countries experiencing capital inflows, with the opposite effect at work in surplus countries. But why then do households in some countries borrow systematically more against future income than in others? Ahlquist and Ansell (2014) offer a compelling answer: In countries with majoritarian election systems that produce a right-wing bias, politicians will respond to growing inequality by making credit accessible to lower-income groups, while in proportional representation systems with their built-in left-wing bias, they will opt for redistributive policies. The rapidly worsening inequality in the United States and the UK, for example, is thus to blame for the increase in borrowing by private households, which in turn have affected the current account balance negatively.

Intertemporal trade. The most rigorous approach sees the current account as an intertemporal allocation of consumption (Obstfeld & Rogoff, 1995), based on the standard assumption that individuals dislike fluctuations in consumption and use savings (i.e. assets) to smooth consumption over time. Absent pronounced differences in economic cycles, countries have to have different preferences for consumption smoothing. Some prefer consumption today, others postpone it to the future. Kraay and Ventura (2000; 2003) build on this model to explain how countries react to income shocks by investing partly at home and partly abroad. These models, however, are much better at explaining short-term movements than long-term equilibria. In general, there is very little research exploring why whole countries would have significantly different discount rates than others over long periods of time.

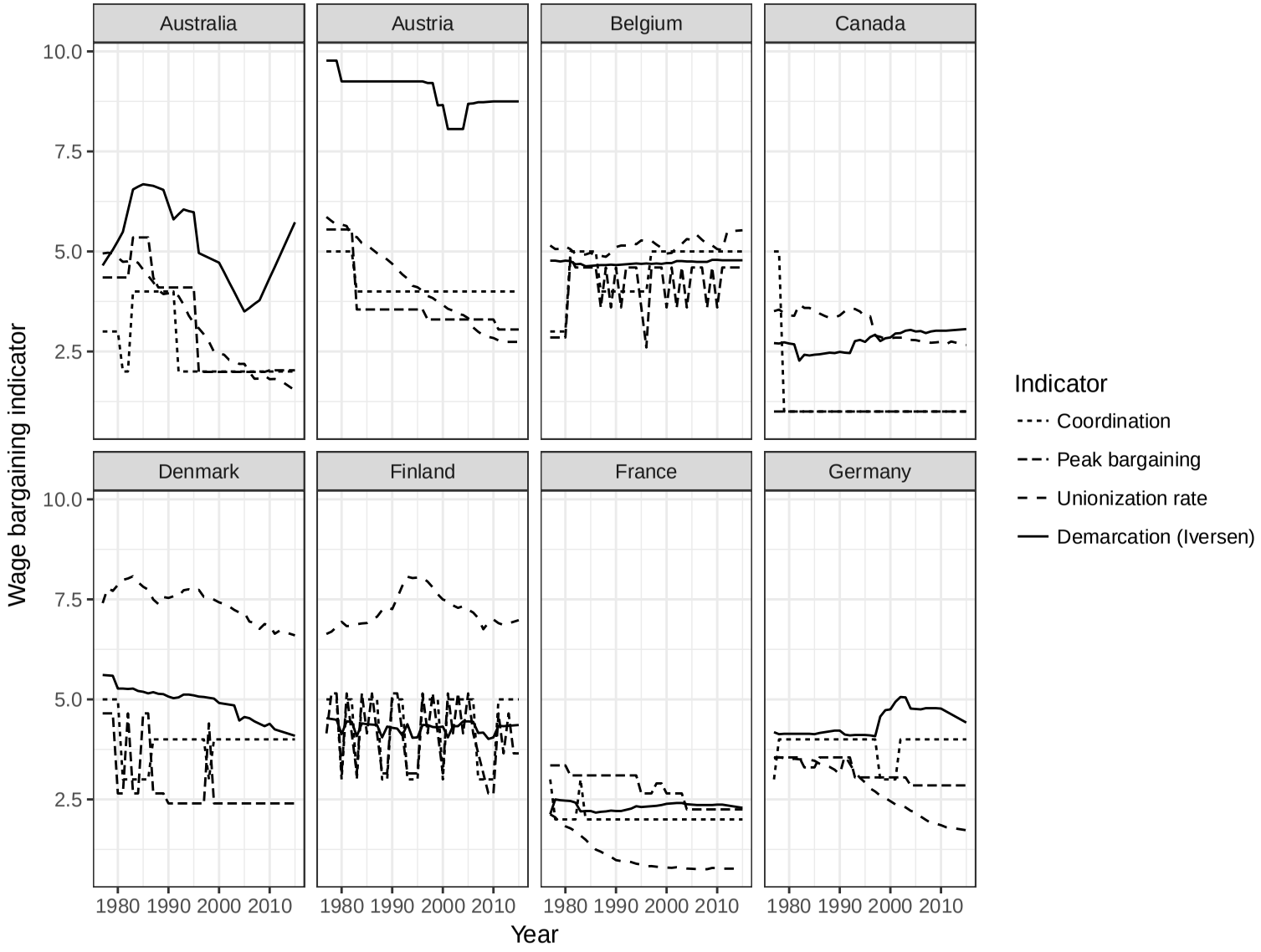
Empirical studies of these arguments requires modelling the current account as determined by savings and investment behaviour. The seminal papers have been submitted by Chinn and collaborators (Chinn, 2005; Chinn & Ito, 2007; Chinn & Prasad, 2003), who find that government budget balances, (among developing countries) financial deepening and terms of trade volatility are correlated with current account surpluses. Macroeconomic uncertainty also increases domestic saving and slightly negatively affects investment. They also control for the net foreign asset position, making their approach compatible with an intertemporal savings model. The papers therefore offer support for the twin deficit view, a global savings glut based on precautionary savings and insufficient financial deepening.

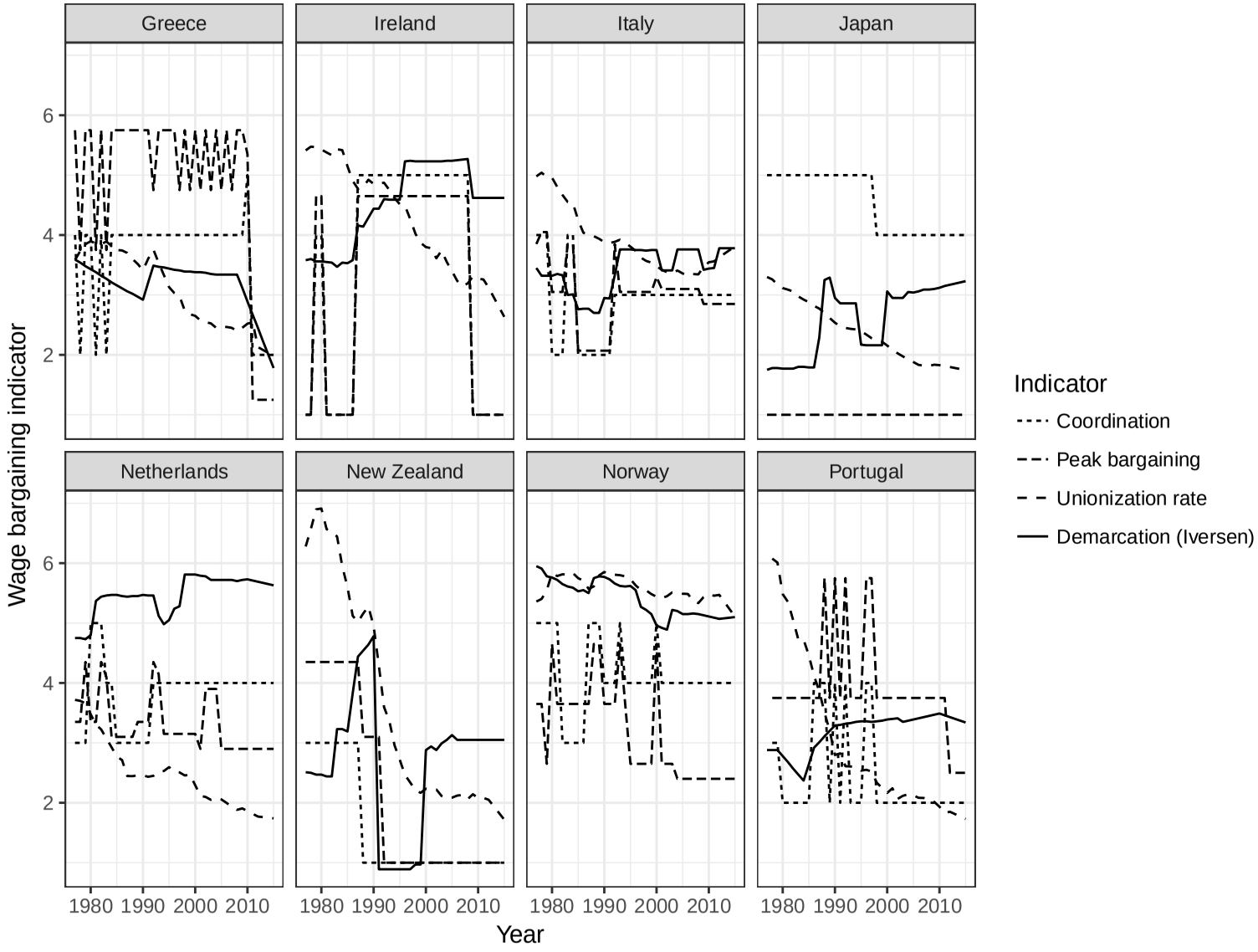
A6 Tradable and Non-Tradable Industries

A sector is considered tradable if it exports more than 10 percent of its output. Following De Gregorio, Giovannini, and Wolf (1994) we find this to be the case for agriculture, hunting, forestry and fishing, mining and quarrying, manufacturing, transport, storage and communication, to which we add financial intermediation, as does Schmillen (2013). Nontraded industries are electricity generation and distribution, gas and water supply, construction, wholesale and retail trade, hotels and restaurants, real estate renting and business services, and community, social and personal services.

A7 Wage Bargaining Institutions over Time

Our analysis is based on the assessment that wage bargaining institutions change only very slowly or not all over time. The figures in this section show that this is indeed the case for the countries in our sample. Our indicator *Coordination* changes very little and usually vary minimally around a constant mean.


Australia
Austria
Belgium
Canada
Denmark
Finland
France
Germany
Wage bargaining indicator
10.0
7.5
5.0
2.5
1980 1990 2000 2010
Year
Indicator
Coordination
Peak bargaining
Unionization rate
Demarcation (Iversen)


Greece
Ireland
Italy
Japan
Netherlands
New Zealand
Norway
Portugal
Wage bargaining indicator
2
4
6
1980 1990 2000 2010
Year
Indicator
Coordination
Peak bargaining
Unionization rate
Demarcation (Iversen)

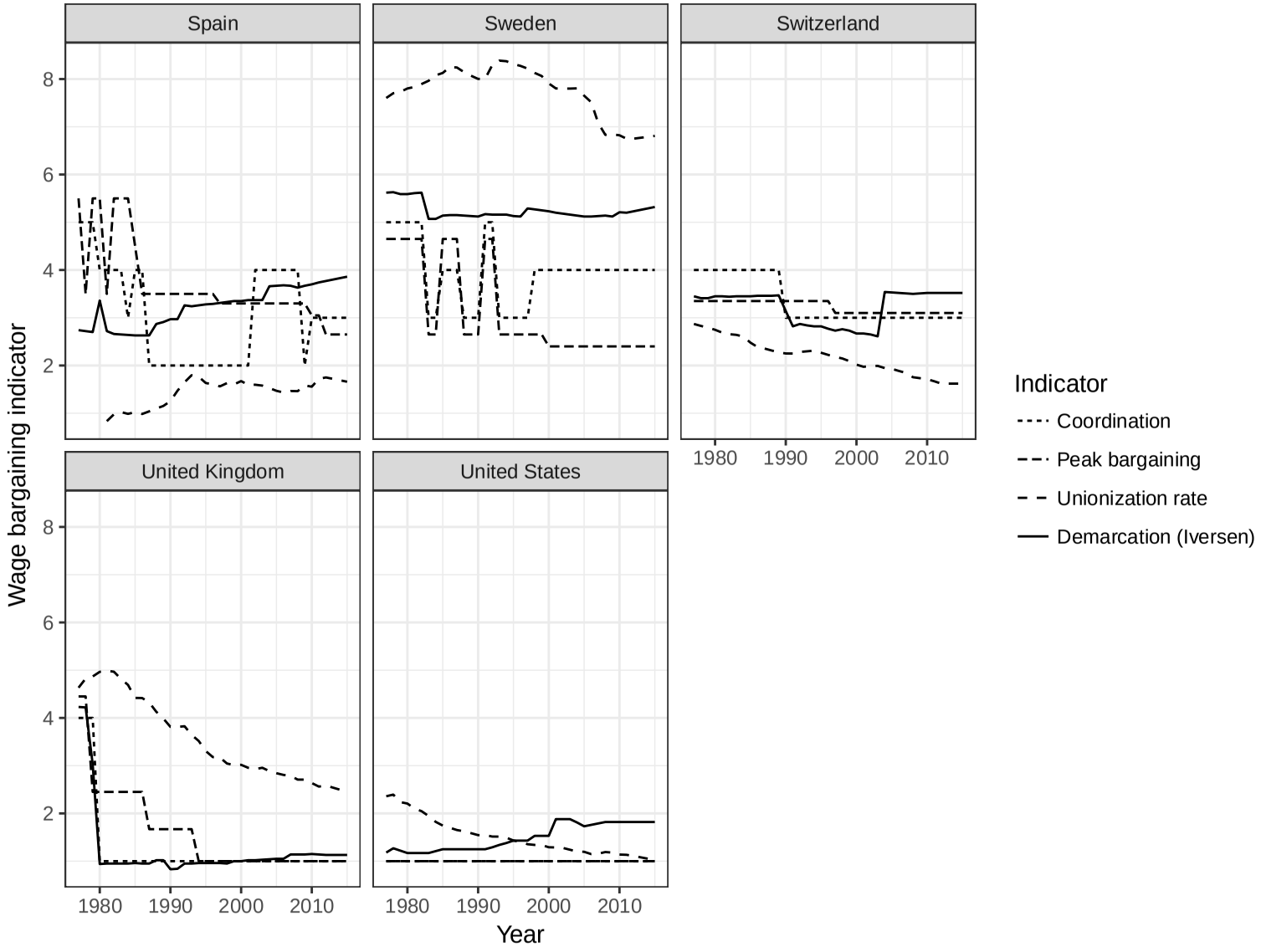

Spain
Sweden
Switzerland
United Kingdom
United States
Wage bargaining indicator
Year
2
4
6
8
1980
1990
2000
2010
Indicator
Coordination
Peak bargaining
Unionization rate
Demarcation (Iversen)

Table A4: Correlations between wage bargaining variables

	Coord	Demarcation	Peak	Unionization
Coord	1			
Demarcation	0.565	1		
Peak	0.611	0.452	1	
Unionization	0.422	0.405	0.320	1

A8 Major Surplus Countries

In this section, we investigate whether our results change if we drop the countries from the analysis that have persistent current account surpluses for unrelated, structural reasons. We therefore exclude Japan, the Netherlands, Norway and Switzerland from the sample. As Table A5 shows, nothing changes about our conclusions.

Table A5: Without major surplus countries

	Trade balance		Current account	
	(1)	(2)	(3)	(4)
Coord_i	1.692***	1.519***	1.076**	0.829***
	(0.558)	(0.567)	(0.424)	(0.272)
$\text{NFA}_{i,t-1}$			0.023***	0.028***
			(0.006)	(0.005)
$\text{Fiscal}_{i,t}$	0.237***	0.193***	0.229***	0.145***
	(0.039)	(0.035)	(0.039)	(0.035)
$\text{Stock}_{i,t}$	0.001	-0.000	0.003	0.004
	(0.004)	(0.004)	(0.004)	(0.004)
$\text{Intermed}_{i,t}$	-0.181	-0.096	-0.685***	-0.483***
	(0.134)	(0.134)	(0.135)	(0.130)
$\text{Old}_{i,t}$	-0.463***	-0.454***	-0.157**	0.013
	(0.078)	(0.059)	(0.076)	(0.054)
$\text{Young}_{i,t}$	-0.063	-0.090**	0.153***	0.064
	(0.046)	(0.044)	(0.045)	(0.039)
$\text{GDPpc}_{i,t}$	0.276***	0.148***	0.132**	0.168***
	(0.055)	(0.026)	(0.053)	(0.025)
$\text{Growth}_{i,t}$	0.040	0.035	0.098**	0.066*
	(0.046)	(0.038)	(0.046)	(0.039)
$\text{ToT}_{i,t}$	0.068**	0.098***	0.039	0.089***
	(0.029)	(0.027)	(0.029)	(0.028)
$\text{Credit}_{i,t}$	-0.080***	-0.086***	-0.079***	-0.086***
	(0.014)	(0.014)	(0.014)	(0.014)

$\text{FuelExp}_{i,t}$	-0.023	-0.082***	-0.001	-0.052*
	(0.036)	(0.031)	(0.035)	(0.028)
$\text{KAOpen}_{i,t}$	0.549***	0.659***	-0.117	0.152
	(0.185)	(0.173)	(0.184)	(0.169)
$\text{OrigSin}_{i,t}$	-0.022	-0.119	-0.285***	-0.375***
	(0.079)	(0.073)	(0.079)	(0.072)
$\text{Eurocrisis}_{i,t}$	6.760***	7.120***	4.987***	4.688***
	(0.705)	(0.680)	(0.835)	(0.788)
Constant	-4.053**	-4.112**	-7.705***	-3.287***
	(2.021)	(1.771)	(1.653)	(0.837)
Year FE	Yes	No	Yes	No
Sd(Cons)	2.51	2.56	1.84	1.06
p	0.000	0.000	0.000	0.000
N	661	661	661	661

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

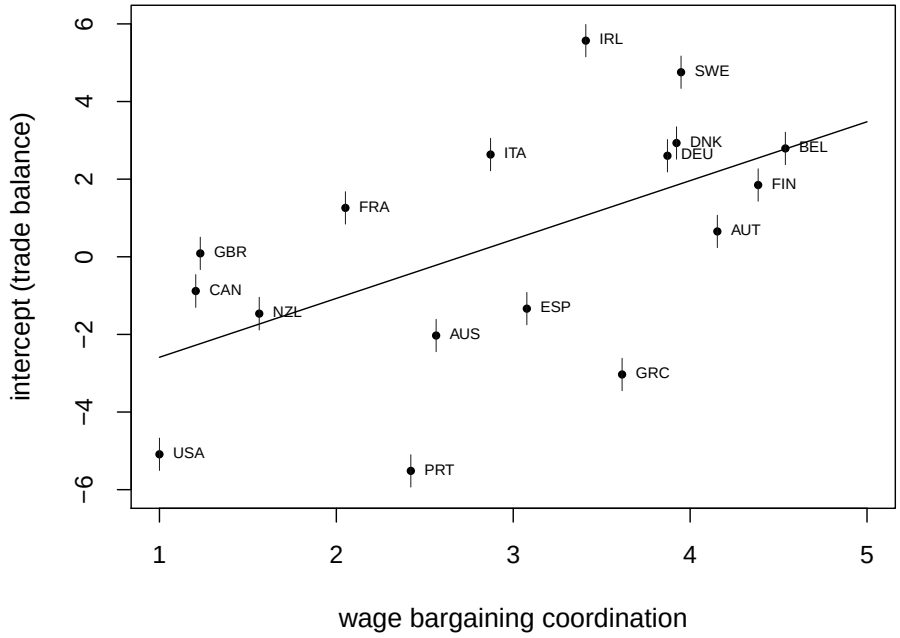
Next, we calculate counterfactuals for these countries and compare the predicted outcome for actual country values on a variable with the predicted outcome if the variable were at the sample mean. Figure A6 shows the predict country-specific intercepts when we drop these outliers. Again nothing changes about the conclusions.

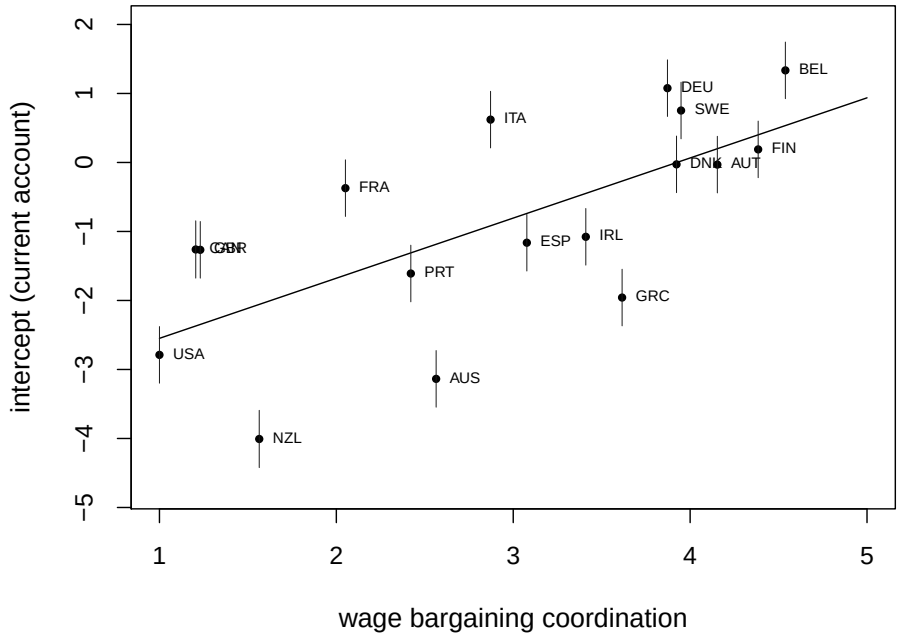
Table A6: Substantive predictions of effects for selected surplus countries

Predicted Effects					
Current Account Equation	sample mean	CHE	JPN	NLD	NOR
Coordination	4.421	0.286	1.988	0.974	1.409
Net foreign assets	-0.426	3.845	1.272	0.693	1.008
KA openness	0.001	-0.045	-0.048	-0.056	0.045
Original Sin	-0.001	0.512	0.182	-0.210	0.580
Trade Balance Equation					
Coordination	5.003	0.324	2.250	1.103	1.594
Fuel exports	0.001	-0.160	-0.165	0.083	0.982

The values in Table A6 can be interpreted as "what the value would be at the sample mean" plus what the country-specific difference from the mean adds to the respective dependent variable. So while a country with a coordination score at the sample mean would have a current account surplus of 4.421, Japan's above-average coordination score adds a further estimated 1.988 percent of GDP to the current account balance.

Figure A6: Effect of wage-bargaining coordination, without major surplus countries (CHE, NLD, NOR, JPN)





A9 Cross-sectional Analysis

Given the long term persistence of current account imbalances, much of the variation is in the cross-section across countries. A straightforward approach to show such cross-sectional variation is to regress the long-term average of each of the main variables on averages of the others. To illustrate, Figures A7 and A8 explore the empirical relationship between the mean of the trade balance (top panel) and the current account (bottom panel) and the degree of wage bargaining coordination over the years 1977-2015. The figures shows that even in the simple cross-section, the trade balance is systematically greater for countries with a more coordinated wage bargaining system. Countries with the lowest degree of coordination are predicted to have an average trade balance of around -2.5%; countries with a mean level of coordination are predicted to have an average trade balance of roughly 0; and countries with the higher level of coordination are predicted to have an average trade balance of approximately 2.5%. We see a similar pattern for the overall current account, although some countries residuals shift around. Switzerland, for instance, has a high level of net foreign assets and therefore receives a significant net inflow of capital from returns on foreign investments. This is consistent with the main implication of our argument.

Figure A7: Trade Balance and Wage Bargaining Coordination

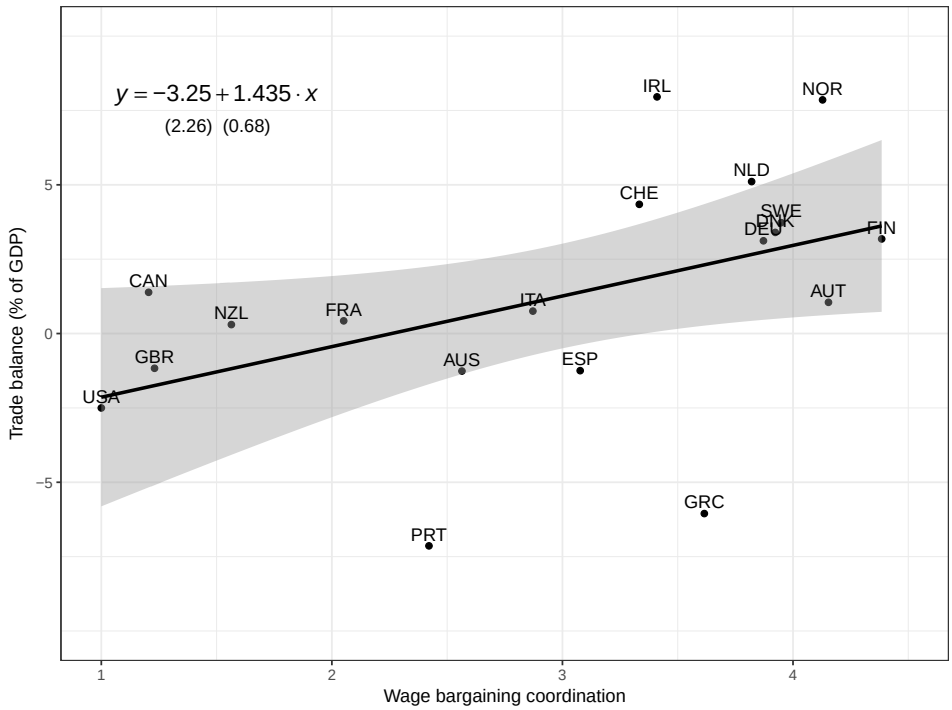
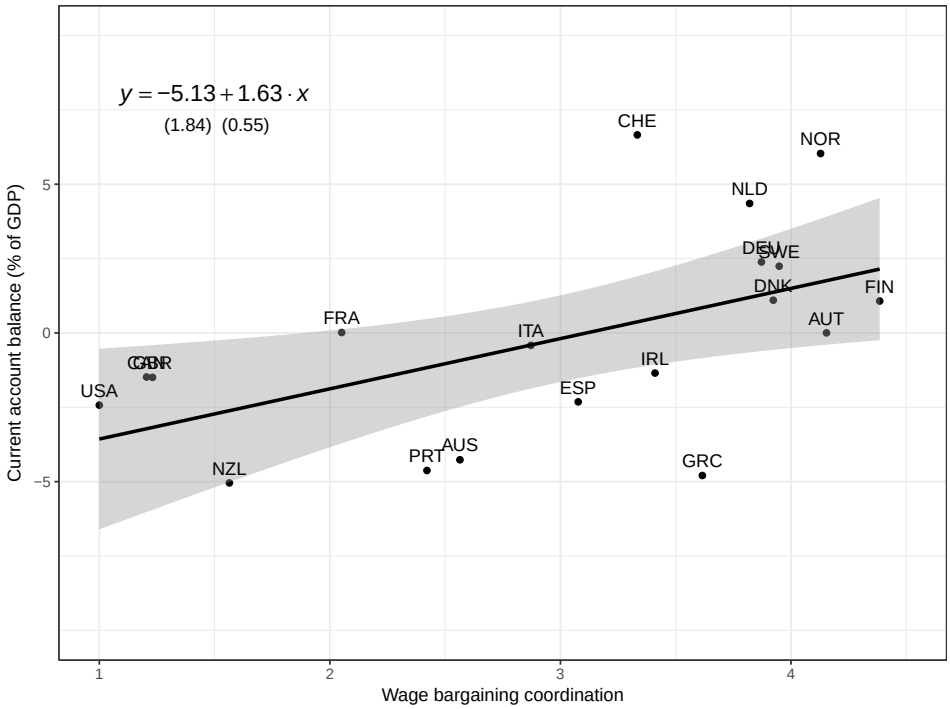


Figure A8: Current Account Balance and Wage Bargaining Coordination



A10 Complete Results for Interaction Models

Table A7: Effect of exchange rate

	Trade balance			Current account		
	(A1)	(A2)	(A3)	(A4)	(A5)	(A6)
$Coord_i$	1.084**	1.194***	1.249***	0.823**	1.241***	1.259**
	(0.448)	(0.418)	(0.469)	(0.367)	(0.406)	(0.490)
$XRfix_{i,t}$	-4.822			-3.663		
	(3.078)			(2.599)		
$Coord_i$*$XRfix_{i,t}$	1.548*			1.264*		
	(0.892)			(0.750)		
$Euro_{i,t}$		-4.831			-8.032*	
		(5.100)			(4.708)	
$Coord_i$*$Euro_{i,t}$		1.874			2.077	
		(1.412)			(1.305)	
$Euro1_{i,t}$			-5.754			-9.358**
			(4.393)			(4.042)
$Euro2_{i,t}$			3.714			4.574
			(7.857)			(5.650)
$Coord_i$*$Euro1_{i,t}$			2.107*			2.538**
			(1.212)			(1.117)
$Coord_i$*$Euro2_{i,t}$			-0.008			-0.857
			(2.189)			(1.584)
$NFA_{i,t-1}$				0.034***	0.034***	0.037***
				(0.005)	(0.005)	(0.005)
$Fiscal_{i,t}$	0.203***	0.220***	0.194***	0.210***	0.215***	0.194***
	(0.035)	(0.034)	(0.035)	(0.036)	(0.035)	(0.035)
$Stock_{i,t}$	0.013***	0.015***	0.015***	0.014***	0.015***	0.013***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
$Intermed_{i,t}$	-0.063	-0.086	-0.188*	-0.324***	-0.308***	-0.371***
	(0.112)	(0.112)	(0.113)	(0.113)	(0.114)	(0.113)
$Old_{i,t}$	-0.196***	-0.105**	-0.156***	-0.105**	-0.084	-0.135***
	(0.051)	(0.050)	(0.050)	(0.052)	(0.052)	(0.052)
$Young_{i,t}$	-0.139***	0.030	0.036	0.044	0.140***	0.161***
	(0.050)	(0.045)	(0.044)	(0.050)	(0.046)	(0.045)
$GDPpc_{i,t}$	0.133***	0.065*	0.008	0.062	-0.032	-0.096**
	(0.038)	(0.038)	(0.039)	(0.039)	(0.041)	(0.042)
$Growth_{i,t}$	0.069*	0.118***	0.114***	0.074*	0.127***	0.128***
	(0.040)	(0.038)	(0.038)	(0.040)	(0.039)	(0.038)
$ToT_{i,t}$	0.065***	0.059***	0.061***	0.057***	0.045**	0.047***
	(0.019)	(0.018)	(0.018)	(0.020)	(0.019)	(0.018)
$Credit_{i,t}$	-0.077***	-0.066***	-0.066***	-0.078***	-0.070***	-0.067***
	(0.013)	(0.012)	(0.012)	(0.013)	(0.012)	(0.012)

$\text{FuelExp}_{i,t}$	0.048**	0.067***	0.116***	0.053**	0.083***	0.137***
	(0.023)	(0.022)	(0.023)	(0.022)	(0.023)	(0.024)
$\text{KAOpen}_{i,t}$	0.545***	0.831***	0.827***	0.186	0.595***	0.592***
	(0.170)	(0.169)	(0.168)	(0.172)	(0.174)	(0.172)
$\text{OrigSin}_{i,t}$	-0.217***	-0.483***	-0.386***	-0.363***	-0.279**	-0.218*
	(0.069)	(0.117)	(0.122)	(0.070)	(0.120)	(0.124)
$\text{Eurocrisis}_{i,t}$	7.257***	7.863***		6.457***	7.425***	
	(0.676)	(0.712)		(0.770)	(0.782)	
Constant	-2.930*	-5.009***	-5.874***	-5.593***	-7.939***	-8.936***
	(1.708)	(1.608)	(1.753)	(1.485)	(1.594)	(1.830)
Sd(Cons)	2.15	2.04	2.32	1.68	1.97	2.42
Sd(XRfix)	2.65	—	—	2.25	—	—
Sd(Euro)	—	3.57	—	—	3.18	—
Sd(Euro1)	—	—	3.00	—	—	2.65
Sd(Euro2)	—	—	5.43	—	—	4.56
Corr(Cons, XRfix)	0.32	—	—	-0.36	—	—
Corr(Cons, Euro)	—	0.34	—	—	-0.02	—
Corr(Cons, Euro1)	—	—	0.35	—	—	-0.03
Corr(Cons, Euro2)	—	—	0.02	—	—	-0.60
Corr(Euro1, Euro2)	—	—	0.80	—	—	0.42
p	0.000	0.000	0.000	0.000	0.000	0.000
N	817	817	817	817	817	817

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All models with year fixed-effects. Euro1 refers to Eurozone countries from 1999 to 2007; Euro2 refers to Eurozone countries from 2008 to 2015. The complete results, including the control variables, are in the Appendix.

A11 First-stage regressions for IV panel models

Table A8 shows the first-stage regressions for the models (14) and (16) in Table 4 in the main text.

Table A8: First stage regressions for IV panel models

	Trade balance	Current account
	First stage for (14)	First stage for (16)
Coord(1975)_i	0.580***	0.595***
	(0.029)	(0.029)
$\text{TB}_{i,t-1}$	0.068***	
	(0.011)	
$\text{CU}_{i,t-1}$		0.076***
		(0.011)
$\text{Fiscal}_{i,t}$	0.002	0.006
	(0.013)	(0.012)
$\text{Stock}_{i,t}$	-0.006***	-0.007***
	(0.001)	(0.001)
$\text{Intermed}_{i,t}$	0.008	0.007
	(0.032)	(0.032)
$\text{Old}_{i,t}$	-0.031**	-0.054***
	(0.013)	(0.013)
$\text{Young}_{i,t}$	-0.090***	-0.079***
	(0.013)	(0.013)
$\text{GDPpc}_{i,t}$	0.001	0.002
	(0.008)	(0.008)
$\text{Growth}_{i,t}$	-0.011	-0.013
	(0.016)	(0.016)
$\text{ToT}_{i,t}$	0.003	0.004
	(0.008)	(0.008)
$\text{Credit}_{i,t}$	0.005	0.005
	(0.005)	(0.005)
$\text{FuelExp}_{i,t}$	-0.003	-0.003
	(0.003)	(0.003)
$\text{KAOpen}_{i,t}$	-0.173***	-0.132**
	(0.059)	(0.056)
$\text{OrigSin}_{i,t}$	0.104***	0.113***
	(0.021)	(0.021)
$\text{Eurocrisis}_{i,t}$	-1.637***	-1.279***
	(0.314)	(0.289)
R^2	0.51	0.52
F	39.00	39.06
p	0.000	0.000
N	814	815

Robust standard errors in parentheses. *** $p < 0.01$,
** $p < 0.05$, * $p < 0.1$.

A12 Robustness Checks: Alternative Measures of Wage Bargaining

This section shows the results of our robustness checks when we substitute our measure of *Coordination* with alternative indicators of wage bargaining institutions. We use three alternative indicators: a composite measure of international and external boundaries of union authority[2] referred to as *demarcation*, which is a rating of union confederations based on whether they have strong external or internal cleavages that lead to conflict and competition, the *unionization* rate, measured as union members as a proportion of wage earners in employment (Visser, 2015, p. 26), and a measure that we call *peak* (called "cwb" in the ICTWSS data) which denotes the "actual" level at which bargaining takes places, from peak labour organizations to the firm level (Visser, 2015, p. 15), with higher values denoting less freedom of bargaining at the enterprise level.

We expect *unionization* and *demarcation* to have similar but probably less pronounced effects than *coordination* because they are preconditions of the latter (for example, without widespread union membership, coordination is hardly meaningful), but unionization or precise demarcation as such do not automatically imply wage restraint. We have no expectations for *peak* because it should not matter functionally at which level the bargaining takes place.

Absent coordination, there is no evidence of an effect on the trade or current account balance. In contrast, the degree of *unionization* has a moderately positive effect, since wage-bargaining coordination is more meaningful greater unionization. This finding runs counter to the argument that an undifferentiated weakening of labor unions facilitates wage compression and export-led growth. Unsurprisingly, interacting coordination and unionization has a strong, positive effect on trade balances and current accounts. Similar results hold for Iversen's measure of *demarcation* (Iversen, 1999).

[2]This measure originates with Iversen (1999) and is called *centi* in the ICTWSS data set.

Table A9: Robustness checks: Alternative Measures of wage bargaining (hierarchical models)

	Trade Balance					Current Account			
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
Union$_i$	0.079**					0.024			
	(0.032)					(0.030)			
CoXUn$_i$		0.753***					0.415*		
		(0.256)					(0.236)		
Demarcation$_i$			0.566***					0.078	
			(0.160)					(0.157)	
Peak$_i$				0.566					0.380
				(0.636)					(0.540)
				(control variables omitted)					
Sd(Cons)	2.63	2.52	2.76	2.94		2.46	2.30	2.50	2.47
p	0.000	0.000	0.000	0.000	.	0.000	0.000	0.000	0.000
N	817	817	817	817	819	817	817	817	817

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

A13 Robustness Checks: Two-stage Hierarchical Models

Table A10 explores the importance of the modelling assumptions underlying the hierarchical setup used for the estimations in table 2 in the paper. We now estimate the hierarchical models using a two-step procedure. In the first step, we use a country fixed-effects model to estimate the effect of the time-varying explanatory variables on the movement of the trade balance and the current account within a country over time. The country dummies that are included in this model constitute the estimated country-specific intercepts. In the second step, we then regress the estimated intercepts of the 21 countries on the (time-invariant) mean of our explanatory variable *coordination* while using the Lewis-Linzer (2005) procedure to obtain correct standard errors. In this approach, common in the labor economics literature (see e.g. Bover et al. 2014), the second-stage estimates represent the cross-sectional contribution to the variation in outcomes. Again, the coefficients on *coordination* are remarkably stable, clearly statistically significant, and substantively of comparable size, offering further support for our findings.

Table A10: Effect of wage bargaining on trade balance / current account (two-step models)

	Trade Balance		Trade Balance		Current Account		Current Account	
	1^{st} step	2^{nd} step	1^{st} step	2^{nd} step	1^{st} step	2^{nd} step	1^{st} step	2^{nd} step
Coord$i$		1.718***		1.656***		1.554***		1.572***
		(0.557)		(0.528)		(0.353)		(0.462)
NFA$i,t-1$					0.036***		0.037***	
					(0.005)		(0.005)	
Fiscali,t	0.150***		0.170***		0.118***		0.152***	
	(0.034)		(0.036)		(0.035)		(0.036)	
Stocki,t	0.009***		0.008**		0.012***		0.009**	
	(0.003)		(0.004)		(0.003)		(0.004)	
Intermedi,t	0.087		0.071		-0.104		-0.282**	
	(0.119)		(0.121)		(0.122)		(0.122)	
Oldi,t	-0.338***		-0.269***		-0.122***		-0.162***	
	(0.039)		(0.051)		(0.040)		(0.052)	
Youngi,t	-0.107**		-0.061		0.104**		0.204***	
	(0.042)		(0.045)		(0.043)		(0.046)	
GDPpci,t	0.012***		0.021***		0.011***		0.008**	
	(0.002)		(0.004)		(0.002)		(0.004)	
Growthi,t	0.045		0.039		0.085**		0.076**	
	(0.035)		(0.036)		(0.036)		(0.036)	
ToTi,t	0.095***		0.082***		0.085***		0.065***	
	(0.020)		(0.020)		(0.021)		(0.020)	
Crediti,t	-0.084***		-0.080***		-0.081***		-0.074***	
	(0.014)		(0.013)		(0.014)		(0.013)	
KA opennessit	0.312*		0.184		0.154		-0.244	
	(0.163)		(0.173)		(0.168)		(0.174)	
FuelExpit	0.032		0.040		0.084***		0.103***	
	(0.024)		(0.025)		(0.026)		(0.026)	
Eurocrisisit	5.403***		5.980***		3.639***		4.912***	
	(0.660)		(0.680)		(0.794)		(0.796)	
Constant		-4.319**		-5.076***		-4.545***		-3.236**
		(1.849)		(1.751)		(1.174)		(1.533)
Country FE	Yes	–	Yes	–	Yes	–	Yes	–
Period FE	No	–	Yes	–	No	–	Yes	–
p	0.000	0.006	0.000	0.005	0.000	0.000	0.000	0.003
N	817	21	817	21	817	21	817	21

Notes: standard errors in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$; second-stage was estimated using FGLS (Lewis and Linzer 2005)

A14 Robustness Checks: Chinn-Ito Medium-term Models

We present a medium-term analysis in table A11 that follows the strategy of Chinn and Prasad (2003). To this end, we take the 5-year averages of our variables for each country from 1977 to 2015 and estimate panel regressions. This approach allows us to assess the robustness of the empirical relationship between coordination and current accounts when we control for a series of variables. Since our key variable hardly varies over time, we do not use country fixed effects, but we estimate models with time dummies. The results again show that wage bargaining *coordination* has a strong and robust effect on both the trade balance and the current account. The effect is positive and statistically significant for all specifications. To interpret the effect substantively, when moving from the lowest to the highest level of wage bargaining centralization, the trade balance increases by approximately 4.4 percentage points. This effect alone amounts to most of the long-term difference between the current account surpluses and deficits of our cases of persistent imbalances. In the cross sections, the effect of wage bargaining on the current account is slightly smaller. The current account balance increases by about 2.67 percentage points when moving from the lowest to highest level of centralization.

The results on the control variables are largely consistent with previous research. The initial stock of net foreign assets is an important determinant of our current account variables. Greater levels of foreign assets lead to a higher value of the trade balance and the current account. Our estimates of the coefficient on the current account are almost identical with those from Chinn and Prasad (2003) for industrialized countries, although the time period of our datasets only partially overlaps: Their estimate of the coefficient on net foreign assets is 0.056 (Table 3, third column), compared to 0.077 in our analysis. Their dataset starts 6 years earlier and ends 20 years before ours. The other main control variable is the fiscal balance, suggesting that greater fiscal surpluses lead to greater current account surpluses, or vice versa that greater fiscal deficits lead to increased current account deficits (Chinn & Ito, 2007, 2008), as well as expansion of private credit. The effects of the other variables are less pronounced or not robust. Interestingly, and consistent with previous research, the coefficients of the demography variables are not consistently statistically significant. This implies that socio-economic developments like the ageing of industrialized societies are not among the likely causes of the long- and medium-term current account imbalances among OECD countries, although they likely have much explanatory power when there is greater divergence, such as between developed (and aging) and developing (and relatively younger) countries.

Table A11: Medium-term patterns in trade balance and current account (5-year averages)

	Trade Balance			Current Account		
	(1)	(2)	(3)	(4)	(5)	(6)
Coordination	1.199***	1.169***	1.102***	1.375***	0.677***	0.667***
	(0.271)	(0.281)	(0.283)	(0.202)	(0.218)	(0.224)
NFA					0.053***	0.047***
					(0.008)	(0.007)
Fiscal balance		0.487***	0.473***		0.337***	0.341***
		(0.117)	(0.106)		(0.079)	(0.075)
Stock capitalization		0.010	0.005		0.013*	0.012*
		(0.010)	(0.009)		(0.008)	(0.007)
Financial mediation		0.384	0.618*		-0.237	0.023
		(0.335)	(0.323)		(0.216)	(0.184)
Terms of Trade		0.011	0.093		-0.036	0.037
		(0.097)	(0.083)		(0.073)	(0.068)
Credit		-0.442***	-0.445***		-0.368***	-0.369***
		(0.139)	(0.140)		(0.085)	(0.082)
Flexible XR		-1.708***	-1.809***		-0.720	-0.830*
		(0.614)	(0.629)		(0.468)	(0.475)
Dependency ratio (old)		-0.106	-0.061		0.018	0.075
		(0.107)	(0.093)		(0.073)	(0.071)
Dependency ratio (young)		0.175**	0.128		0.060	0.005
		(0.088)	(0.089)		(0.060)	(0.062)
KA openness		1.763***	2.059***		0.630**	0.938***
		(0.456)	(0.430)		(0.288)	(0.285)
FuelExp		0.033	0.052**		0.025	0.039**
		(0.024)	(0.022)		(0.022)	(0.019)
Original Sin		-2.902*	-2.018		-2.945**	-2.396**
		(1.625)	(1.675)		(1.268)	(1.124)
Constant	-5.823***	-9.859**	-8.572*	-6.799***	-4.553	-3.577
	(1.302)	(4.802)	(4.709)	(0.981)	(3.759)	(3.956)
Adj. R^2	0.15	0.49	0.49	0.19	0.63	0.62
F	5.07	11.80	15.20	7.32	18.75	28.31
p	0.000	0.000	0.000	0.000	0.000	0.000
N	168	168	168	168	168	168

Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

A15 Further Robustness Checks: Effects Over Time

In the regressions shown in Table A12, we explore the possibility that the pre-Euro period (up to and including 1998) or the post-Global Financial Crisis period could show very different trends. To this end, we interact period dummies with our main independent variable. The combined effect is minimally smaller before 1999, but the overall conclusions remain unchanged.

We also explore five-year periods by interacting five-year periods dummies with *coordination*. The effect is small in the first period that includes the Second Oil Shock, but is statistically significant since the early 1980s. With increasing trade openness, *coordination* exerts an increasingly strong positive effect on the current account.

Table A12: Temporal subsamples

	Trade Balance		Current Account	
	(1)	(2)	(3)	(4)
$Coord_i$	0.935*	-0.014	0.804**	-0.018
	(0.532)	(0.588)	(0.339)	(0.505)
p1999	-5.991***		-5.265***	
	(0.704)		(0.737)	
p2008	-5.316***		-3.759***	
	(0.774)		(0.831)	
$Coord_i$*p1999	1.783***		1.740***	
	(0.201)		(0.211)	
$Coord_i$*p2008	1.549***		1.213***	
	(0.225)		(0.246)	
p1981		-2.649**		-1.871*
		(1.094)		(1.109)
p1986		-3.456***		-1.443
		(1.139)		(1.154)
p1991		-2.839**		0.126
		(1.160)		(1.178)
p1996		-5.495***		-2.307*
		(1.215)		(1.233)
p2001		-7.850***		-3.689***
		(1.274)		(1.302)
p2006		-8.753***		-4.417***
		(1.325)		(1.369)
p2011		-6.466***		-1.598
		(1.340)		(1.400)
$Coord_i$*p1981		1.030***		0.992***
		(0.324)		(0.328)
$Coord_i$*p1986		1.051***		1.038***
		(0.328)		(0.332)
$Coord_i$*p1991		1.302***		1.098***
		(0.325)		(0.330)

$Coord_i$*p1996		1.883***		1.780***
		(0.327)		(0.331)
$Coord_i$*p2001		2.974***		2.814***
		(0.328)		(0.335)
$Coord_i$*p2006		2.944***		2.799***
		(0.339)		(0.350)
$Coord_i$*p2011		2.586***		2.329***
		(0.345)		(0.362)
$NFA_{i,t-1}$			0.024***	0.024***
			(0.005)	(0.005)
$Fiscal_{i,t}$	0.177***	0.191***	0.146***	0.177***
	(0.033)	(0.033)	(0.034)	(0.033)
$Stock_{i,t}$	0.011***	0.011***	0.012***	0.012***
	(0.003)	(0.003)	(0.003)	(0.003)
$Intermed_{i,t}$	0.243**	0.321***	-0.041	-0.076
	(0.110)	(0.112)	(0.111)	(0.112)
$Old_{i,t}$	-0.308***	-0.349***	-0.056	-0.168***
	(0.043)	(0.050)	(0.044)	(0.050)
$Young_{i,t}$	-0.126***	-0.113***	0.073*	0.146***
	(0.039)	(0.042)	(0.039)	(0.042)
$GDPpc_{i,t}$	0.161***	0.108***	0.162***	0.044
	(0.029)	(0.037)	(0.030)	(0.038)
$Growth_{i,t}$	0.007	0.055	0.042	0.086**
	(0.034)	(0.035)	(0.035)	(0.035)
$ToT_{i,t}$	0.094***	0.090***	0.082***	0.064***
	(0.018)	(0.018)	(0.019)	(0.019)
$Credit_{i,t}$	-0.088***	-0.078***	-0.084***	-0.075***
	(0.013)	(0.012)	(0.013)	(0.013)
$FuelExp_{i,t}$	0.013	0.005	0.038*	0.053**
	(0.022)	(0.022)	(0.020)	(0.022)
$KAOpen_{i,t}$	0.314**	0.262*	0.151	-0.095
	(0.152)	(0.159)	(0.154)	(0.160)
$OrigSin_{i,t}$	-0.259***	-0.256***	-0.421***	-0.411***
	(0.066)	(0.064)	(0.070)	(0.067)
$Eurocrisis_{i,t}$	6.317***	6.700***	4.110***	4.855***
	(0.654)	(0.657)	(0.756)	(0.756)
Constant	-1.705	0.348	-2.725**	-3.340*
	(1.772)	(2.022)	(1.129)	(1.758)
Sd(Cons)	2.65	2.74	1.59	2.24
p	0.000	0.000	0.000	0.000
N	817	817	817	817

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Years of the time variables denote the first year of the period that the variable captures.

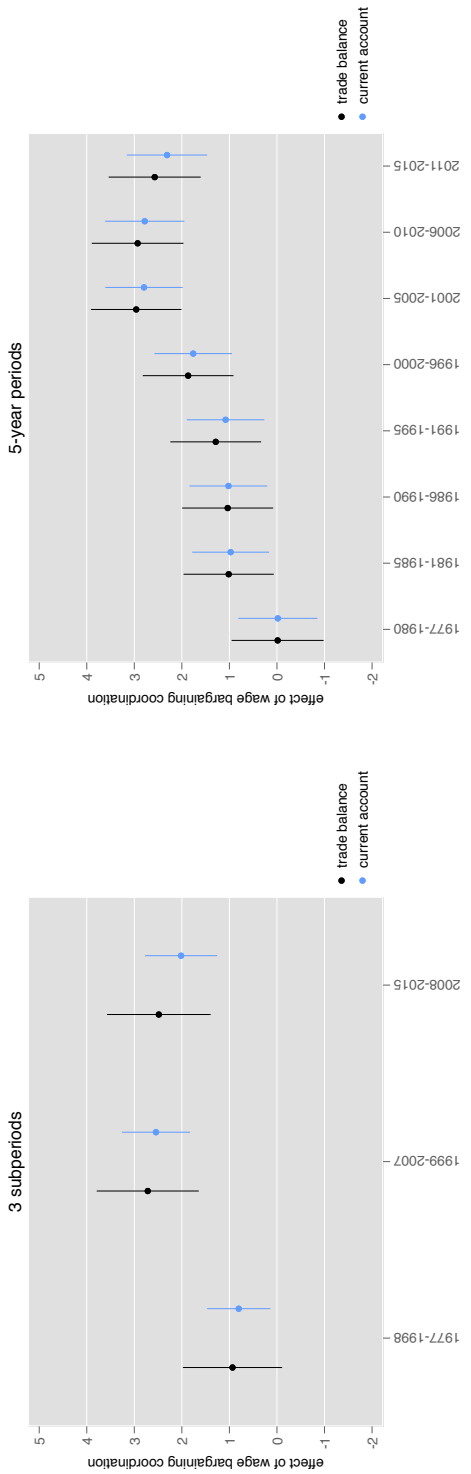


Figure A9: Temporal subsamples in five-year intervals; point estimates with 90% confidence intervals

A16 Pairwise Correlations and Stripped Specifications

We provide pairwise correlations in Table A13. Table A14 presents "stripped" specifications without any control variables and with a reduced set of only those control variables that are statistically significant. The results show that our conclusions do not depend on the inclusion of any particular covariate. Table A15 shows the results of an error correction model (ECM).

Table A13: Pairwise correlations

	$TB_{i,t}$	$CA_{i,t}$	$Coord_i$	$NFA_{i,t-1}$	$Fiscal_{i,t}$	$Stock_{i,t}$	$Inter_{i,t}$	$Old_{i,t}$	$Young_{i,t}$	$GDPpc_{i,t}$	$Growth_{i,t}$	$ToT_{i,t}$	$Credit_{i,t}$	$Fuel_{i,t}$	$KOpen_{i,t}$	$OSin_{i,t}$	$Ecrisis_{i,t}$
$TB_{i,t}$	1.000																
$CA_{i,t}$	0.776	1.000															
	(0.000)																
$Coord_i$	0.318	0.395	1.000														
	(0.000)	(0.000)															
$NFA_{i,t-1}$	0.227	0.574	0.250	1.000													
	(0.000)	(0.000)	(0.000)														
$Fiscal_{i,t}$	0.409	0.397	0.155	0.228	1.000												
	(0.000)	(0.000)	(0.000)	(0.000)													
$Stock_{i,t}$	0.187	0.230	-0.240	0.237	0.198	1.000											
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)												
$Inter_{i,t}$	0.108	0.062	-0.278	0.205	-0.116	0.545	1.000										
	(0.002)	(0.077)	(0.000)	(0.000)	(0.001)	(0.000)											
$Old_{i,t}$	0.021	0.218	0.301	0.147	0.014	0.013	-0.161	1.000									
	(0.542)	(0.000)	(0.000)	(0.000)	(0.695)	(0.705)	(0.000)										
$Young_{i,t}$	-0.136	-0.263	-0.264	-0.196	-0.059	-0.256	-0.100	-0.631	1.000								
	(0.000)	(0.000)	(0.000)	(0.000)	(0.091)	(0.000)	(0.004)	(0.000)									
$GDPpc_{i,t}$	0.483	0.451	-0.009	0.309	0.363	0.503	0.388	0.331	-0.475	1.000							
	(0.000)	(0.000)	(0.791)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)								
$Growth_{i,t}$	0.119	0.086	-0.015	0.019	0.242	0.125	0.014	-0.192	0.098	-0.014	1.000						
	(0.001)	(0.014)	(0.660)	(0.584)	(0.000)	(0.000)	(0.700)	(0.000)	(0.005)	(0.696)							
$ToT_{i,t}$	0.135	0.129	-0.027	-0.010	0.093	0.046	0.029	-0.009	-0.017	0.040	0.270	1.000					
	(0.000)	(0.000)	(0.436)	(0.770)	(0.008)	(0.185)	(0.408)	(0.792)	(0.619)	(0.252)	(0.000)						
$Credit_{i,t}$	-0.109	-0.108	-0.051	0.046	0.228	0.106	0.004	-0.081	0.001	0.014	0.036	-0.012	1.000				
	(0.002)	(0.002)	(0.144)	(0.186)	(0.000)	(0.002)	(0.914)	(0.020)	(0.983)	(0.691)	(0.309)	(0.723)					
$Fuel_{i,t}$	0.209	0.212	0.045	0.047	0.416	0.002	-0.124	0.033	0.031	0.261	-0.012	0.097	0.049	1.000			
	(0.000)	(0.000)	(0.200)	(0.180)	(0.000)	(0.944)	(0.000)	(0.343)	(0.372)	(0.000)	(0.731)	(0.005)	(0.159)				
$KAOpen_{i,t}$	0.340	0.255	-0.072	0.111	0.219	0.432	0.237	0.262	-0.541	0.633	-0.021	0.001	0.078	-0.027	1.000		
	(0.000)	(0.000)	(0.039)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.550)	(0.974)	(0.026)	(0.444)			
$OrigSin_{i,t}$	0.031	-0.044	-0.109	-0.172	-0.094	0.243	0.095	0.415	-0.414	0.486	-0.130	-0.062	-0.078	-0.087	0.453	1.000	
	(0.382)	(0.214)	(0.002)	(0.000)	(0.007)	(0.000)	(0.006)	(0.000)	(0.000)	(0.000)	(0.000)	(0.078)	(0.026)	(0.012)	(0.000)		
$Ecrisis_{i,t}$	0.103	-0.070	0.000	-0.418	-0.256	-0.025	0.052	0.167	-0.145	0.061	-0.170	0.003	-0.198	0.050	0.113	0.373	1.000
	(0.003)	(0.046)	(0.999)	(0.000)	(0.000)	(0.476)	(0.134)	(0.000)	(0.000)	(0.084)	(0.000)	(0.938)	(0.000)	(0.156)	(0.001)	(0.000)	

Note: p-values in parentheses

Table A14: Stripped specifications

	Trade				Current			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Coord_i	1.435**	1.435**	1.675***	1.809***	1.633***	1.633***	1.349***	1.340***
	(0.648)	(0.648)	(0.476)	(0.504)	(0.526)	(0.526)	(0.285)	(0.269)
$\text{NFA}_{i,t-1}$							0.045***	0.044***
							(0.005)	(0.004)
$\text{Fiscal}_{i,t}$			0.220***	0.168***			0.224***	0.173***
			(0.035)	(0.032)			(0.035)	(0.032)
$\text{Stock}_{i,t}$			0.010***	0.011***			0.008**	0.009***
			(0.003)	(0.003)			(0.003)	(0.003)
$\text{Old}_{i,t}$			-0.235***	-0.312***			-0.173***	-0.120***
			(0.047)	(0.036)			(0.047)	(0.035)
$\text{GDPpc}_{i,t}$			0.269***	0.182***			0.052	0.094***
			(0.037)	(0.016)			(0.037)	(0.016)
$\text{ToT}_{i,t}$			0.085***	0.104***			0.088***	0.102***
			(0.020)	(0.019)			(0.020)	(0.020)
$\text{Credit}_{i,t}$			-0.078***	-0.077***			-0.083***	-0.085***
			(0.013)	(0.014)			(0.014)	(0.014)
$\text{Eurocrisis}_{i,t}$			6.462***	5.947***			4.452***	4.212***
			(0.616)	(0.624)			(0.752)	(0.733)
Constant	-6.295***	-3.248	-4.704***	-4.620***	-7.115***	-5.133***	-6.578***	-4.358***
	(2.257)	(2.152)	(1.792)	(1.672)	(1.871)	(1.748)	(1.253)	(0.888)
Year FE	Yes	No	Yes	No	Yes	No	Yes	No
Sd(Cons)	3.30	3.29	2.39	2.54	2.67	2.66	1.34	1.26
p	0.000	0.027	0.000	0.000	0.000	0.002	0.000	0.000
N	819	819	817	817	819	819	817	817

Standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A15: Error correction models

	Trade Balance		Current Account	
	(1)	(2)	(3)	(4)
$TB_{i,t-1}$	-0.069***	-0.067***		
	(0.020)	(0.020)		
$CU_{i,t-1}$			-0.123***	-0.113***
			(0.023)	(0.023)
Δ $Coord_{i,t}$	0.097	0.098	0.162	0.176
	(0.103)	(0.113)	(0.104)	(0.113)
$Coord_{i,t-1}$	0.198***	0.185***	0.208***	0.203***
	(0.050)	(0.052)	(0.051)	(0.053)
Δ $Fiscal_{i,t}$	0.088**	0.057**	0.122***	0.081**
	(0.034)	(0.029)	(0.041)	(0.035)
$Fiscal_{i,t-1}$	0.007	0.017	0.024	0.027
	(0.020)	(0.020)	(0.022)	(0.020)
Δ $Stock_{i,t}$	0.004*	0.003	0.011***	0.011***
	(0.002)	(0.002)	(0.003)	(0.003)
$Stock_{i,t-1}$	-0.001	-0.001	0.001	0.001
	(0.002)	(0.001)	(0.002)	(0.002)
Δ $Intermed_{i,t}$	-0.054	-0.036	0.083	0.085
	(0.193)	(0.192)	(0.169)	(0.166)
$Intermed_{i,t-1}$	0.090*	0.089*	0.014	0.017
	(0.050)	(0.050)	(0.061)	(0.060)
Δ $Old_{i,t}$	-0.129	-0.189	0.066	-0.101
	(0.218)	(0.185)	(0.226)	(0.191)
$Old_{i,t-1}$	-0.010	-0.012	0.033	0.014
	(0.019)	(0.018)	(0.023)	(0.020)
Δ $Young_{i,t}$	0.123	0.280*	-0.274	-0.029
	(0.171)	(0.154)	(0.181)	(0.162)
$Young_{i,t-1}$	0.056***	0.049**	0.036**	0.024
	(0.018)	(0.019)	(0.017)	(0.018)
Δ $GDPpc_{i,t}$	0.718***	0.609***	0.375	0.183
	(0.247)	(0.218)	(0.266)	(0.233)
$GDPpc_{i,t-1}$	0.011	0.004	0.043**	0.022*
	(0.014)	(0.011)	(0.018)	(0.013)
Δ $Growth_{i,t}$	-0.224***	-0.202***	-0.159*	-0.101
	(0.076)	(0.071)	(0.082)	(0.074)
$Growth_{i,t-1}$	-0.293***	-0.266***	-0.253***	-0.196***
	(0.071)	(0.066)	(0.080)	(0.068)
Δ $ToT_{i,t}$	0.086***	0.097***	0.090***	0.099***
	(0.017)	(0.015)	(0.020)	(0.016)
$ToT_{i,t-1}$	0.076***	0.087***	0.086***	0.097***
	(0.020)	(0.018)	(0.023)	(0.020)

Δ Credit$_{i,t}$	-0.023**	-0.022**	-0.029***	-0.028***
	(0.010)	(0.011)	(0.010)	(0.010)
Credit$_{i,t-1}$	-0.036***	-0.041***	-0.047***	-0.050***
	(0.013)	(0.014)	(0.014)	(0.015)
Δ FuelExp$_{i,t}$	0.135***	0.094***	0.123***	0.096***
	(0.039)	(0.034)	(0.041)	(0.037)
FuelExp$_{i,t-1}$	-0.005	-0.007	-0.003	-0.004
	(0.006)	(0.007)	(0.006)	(0.006)
Δ KAOpen$_{i,t}$	0.234	0.407	-0.187	0.044
	(0.236)	(0.250)	(0.417)	(0.401)
KAOpen$_{i,t-1}$	0.113	0.113	0.103	0.112
	(0.087)	(0.084)	(0.091)	(0.087)
Δ OrigSin$_{i,t}$	-0.108	-0.057	-0.136	-0.118*
	(0.091)	(0.069)	(0.095)	(0.070)
OrigSin$_{i,t-1}$	-0.018	-0.033	-0.062*	-0.086***
	(0.027)	(0.025)	(0.036)	(0.033)
Δ Eurocrisis$_{i,t}$	3.825***	4.018***	2.427***	2.579***
	(0.934)	(0.832)	(0.819)	(0.602)
Eurocrisis$_{i,t-1}$	1.345**	1.280**	1.405***	1.216**
	(0.627)	(0.591)	(0.520)	(0.494)
Constant	-1.194**	-0.695***	-1.402**	-0.691***
	(0.531)	(0.163)	(0.568)	(0.191)
p	0.000	0.000	0.000	0.000
N	795	795	795	795

Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

References

Aizenman, J., & Lee, J. (2008). Financial versus monetary mercantilism: Long-run view of large international reserves hoarding. *World Economy*, *31*(5), 593–611.

Ansell, B. (2014). The political economy of ownership: Housing markets and the welfare state. *American Political Science Review*, *108*(2), 383–402.

Ansell, B. W., & Ahlquist, J. S. (2014). *Does inequality induce more borrowing? electoral institutions and responses to economic polarization* (Working Paper). Oxford: University of Oxford.

Ansell, B. W., & Broz, J. L. (2013). Global capital markets, housing prices, and partisan fiscal policies. In *Annual meeting of the american political science association.* Chicago, IL.

Bernanke, B. S. (2005). *The global saving glut and the U.S. current account: Remarks at the sandridge lecture*. Richmond, VA: Virginia Association of Economists.

Bernanke, B. S. (2010). *Monetary policy and the housing bubble.* Presidential Address, Annual Meeting of the American Economic Association, March 1. Atlanta, GA.

Bover, O., Casado, J. M., Costa, S., du Caju, P., McCarthy, Y., Sierminska, E., ... Zavadil, T. (2014). *The distribution of debt across euro area countries: the role of individual characteristics, institutions and credit conditions* (Deutsche Bundesbank Discussion Paper No. 01/2014). Frankfurt am Main: Deutsche Bundesbank.

Caballero, R. J. (2006). *On the macroeconomics of asset shortages* (NBER Working Paper No. 12753). Cambridge, MA: National Bureau of Economic Research.

Caballero, R. J., Farhi, E., & Gourinchas, P.-O. (2008). An equilibrium model of "global imbalance" and low interest rates. *American Economic Review*, *98*(1), 358–93.

Caballero, R. J., & Krishnamurthy, A. (2009). Global imbalances and financial fragility. *American Economic Review*, *99*(2), 584-588.

Chinn, M. D. (2005). *Getting serious about the twin deficits*. Washington, DC: Council on Foreign Relations.

Chinn, M. D., & Ito, H. (2007). Current account balances, financial development and institutions: Assaying the world 'saving glut'. *Financial Globalization and Integration*, *26*(4), 546–569.

Chinn, M. D., & Ito, H. (2008). Global current account imbalances: American fiscal policy versus east asian savings. *Review of International Economics*, *16*(3), 479–498.

Chinn, M. D., & Prasad, E. S. (2003). Medium-term determinants of current accounts in industrial and developing countries: an empirical exploration. *Journal of International Economics*, *59*(1), 47–76.

De Gregorio, J., Giovannini, A., & Wolf, H. C. (1994). International evidence on tradables and nontradables inflation. *European Economic Review*, *38*(6), 1225–1244.

Dooley, M. P., Folkerts-Landau, D., & Garber, P. (2003). *An essay on the revived bretton woods system* (NBER Working Paper No. 9971). Cambridge, MA: National Bureau of Economic Research.

Dooley, M. P., Folkerts-Landau, D., & Garber, P. (2009). Bretton woods ii still defines the international monetary system. *Pacific Economic Review*, *14*(3), 297–311.

Dustmann, C., Fitzenberger, B., Schönberg, U., & Spitz-Oener, A. (2014). From Sick Man of Europe to Economic Superstar: Germany's Resurgent Economy. *Journal of Economic Perspectives*, *28*(1), 167–188.

Gruber, J. W., & Kamin, S. B. (2007). Explaining the global pattern of current account imbalances.

Journal of International Money and Finance, *26*(4), 500–522.

Iversen, T. (1999). *Contested economic institutions: The politics of macroeconomics and wage bargaining in advanced democracies*. Cambridge: Cambridge University Press.

Jeanne, O., & Rancière, R. (2008). *The optimal level of international reserves for emerging market countries: A new formula and some applications* (CEPR Discussion Paper No. 6723). London: Centre for Economic Policy Research.

Johnson, R. C. (2014). Five facts about value-added exports and implications for macroeconomics and trade research. *Journal of Economic Perspectives*, *28*(2), 119-42.

Johnson, R. C., & Noguera, G. (2012). Accounting for intermediates: Production sharing and trade in value added. *Journal of International Economics*, *86*(2), 224–236.

Ju, J., & Wei, S.-J. (2006). *A solution to two paradoxes of international capital flows* (NBER Working Paper No. 12668). Washington, DC: National Bureau of Economic Research.

Kraay, A., & Ventura, J. (2000). Current accounts in debtor and creditor countries. *Quarterly Journal of Economics*, *115*(4), 1137–1166.

Kraay, A., & Ventura, J. (2003). Current accounts in the long and the short run. In *NBER macroeconomics annual 2002, volume 17* (pp. 65–112). MIT Press.

Krugman, P. R., & Obstfeld, M. (1997). *International economics: Theory and policy* (4th ed.). Reading, MA: Addison-Wesley.

Lewis, J. B., & Linzer, D. A. (2005). Estimating Regression Models in Which the Dependent Variable Is Based on Estimates. *Political Analysis*, *13*(4), 345–364.

Lucas, R. E., Jr. (1990). Why doesn't capital flow from rich to poor countries? *The American Economic Review*, *80*(2), 92–96.

Mendoza, E. G., Quadrini, V., & Ríos-Rull, J.-V. (2009). Financial integration, financial development, and global imbalances. *Journal of Political Economy*, *117*(3), 371–416.

Obstfeld, M. (2010). The immoderate world economy. *Journal of International Money and Finance*, *29*(4), 603–614.

Obstfeld, M., & Rogoff, K. (1995). The intertemporal approach to the current account. In G. M. Grossman & K. Rogoff (Eds.), *Handbook of international economics* (Vol. III, pp. 1731–1799). Amsterdam: Elsevier Science.

Schmillen, A. (2013). Are wages equal across sectors of production? *Economics of Transition*, *21*(4), 655–682.

Visser, J. (2015). *Ictwss data base version 5.0*. Amsterdam: Amsterdam Institute for Advanced Labour Studies (AIAS).

Volcker, P. A. (1987). Facing up to the twin deficits. *Challenge*, *30*(6), 31–36.