

Has the Middle Secured Its Share of Growth or Been Squeezed?

Brian Nolan and David Weisstanner

ONLINE APPENDIX

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Appendix 1: Iversen and Soskice's claims about the middle and the evidence they present

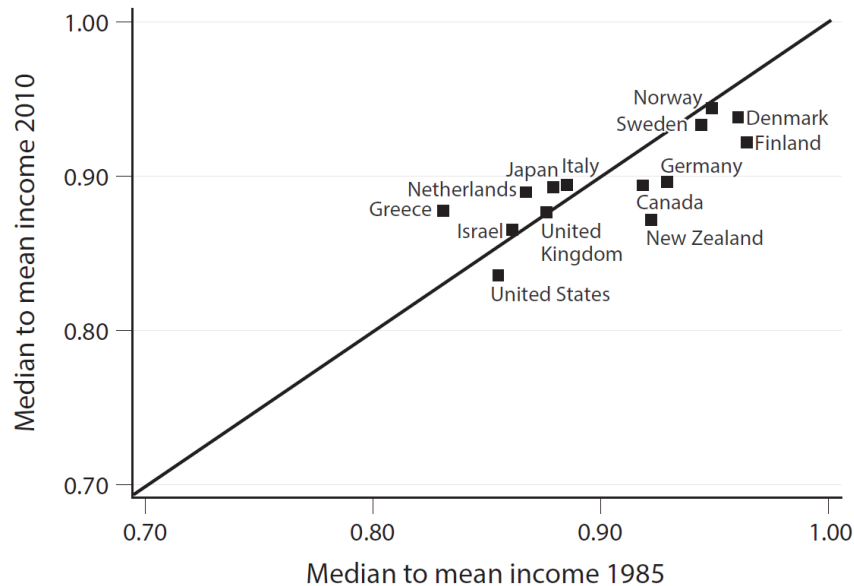
Iversen and Soskice (2019) argue that their model explains the relatively muted response to rising inequality. While acknowledging that income inequality has increased since the mid-1980s in most rich countries, they contend that what electorally decisive middle-class voters care about is securing 'a more or less constant share of the productive capacity of the economy for themselves', and that they have been successful in doing so; this means that what Iversen and Soskice put forward as a 'fundamental law of democracy' holds:

"The essence of democracy is not equality or redistribution. It is instead that the decisive voters—whether they include lower middle or upper middle classes—want to secure a more or less constant share of the productive capacity of the economy for themselves, which is enabled by education and via social transfers largely paid through taxes by those at the top. If this "fundamental law of democracy" holds, the middle classes have a strong interest in promoting the knowledge economy, even when it creates disproportionate gains at the top. Concern for the poor is limited to the extent of the middle classes (or their offspring) being concerned about becoming poor themselves. For those who have acquired the necessary skills to benefit from the knowledge economy, this is a relatively minor consideration, and the interests of the poor are therefore rarely well-attended-to." (Iversen and Soskice 2019: 158)

Iversen and Soskice support the claim that the middle classes in rich countries have in fact secured 'a more or less constant share of the productive capacity of the economy' by looking at the evolution of the ratio of median to mean income for the working age population in 14 OECD countries over the period from around 1985 to 2010. For this exercise they use data from the OECD's Income Distribution and Poverty Dataset (IDD) on real equivalised disposable household incomes for the working-age population (aged 18 to 65 years). This

median-to-mean ratio for around 1985 is plotted against the corresponding figure for 2010 in the key graph reproduced below.

Figure A1: Iversen and Soskice's evidence on median-to-mean ratio, 1985 and 2010



Note: Figure taken from Iversen and Soskice (2019: 24).

Iversen and Soskice interpret this figure as showing that:

“The Y_D/\bar{Y} [median to mean income] ratio in 2010 is more or less the same as it was in 1985 for most countries (the observations lie close to the 45-degree line), and the average difference in the ratio between the two years, Δr , is indistinguishable from zero: $\Delta r = [-0.043; 0.047]$. So it appears that the median income group has been exceptionally successful in keeping up with the overall growth of income.” (Iversen and Soskice 2019: 23)

Note that the axis scale in Figure A1 starts at 0.70 although all the median-to-mean ratios are larger than 0.80, so that their graph gives an impression of stability over time. They acknowledge that the median-to-mean ratio did decrease in a number of countries. However, they argue that in cases such as New Zealand and Germany, average real incomes rose rapidly:

“Even in cases where relative income of the median has slightly slipped, the middle group of income earners is thus clearly enjoying rising incomes despite increasing inequality.” (Iversen and Soskice 2019: 23)

Finally, Iversen and Soskice draw a clear conclusion from their analysis of median-to-mean ratios for the workings of democracy at the heart of their argument:

“For the educated middle classes, however, their interests appear to be well-attended to in public policies, and they have for the most part been able [to] maintain their relative position in an expanding economy, as we showed in chapter 1. Thus, the median disposable income makes up a more or less constant share of average disposable income over time—what we have referred to as the fundamental law of democracy.” (Iversen and Soskice 2019: 168)

Appendix 2: Summary statistics

Table A1: Summary statistics of median-to-mean income ratios

Country	Working-age population (18-65 years)					Entire population				
	Ratio 1985 ^a	Ratio 2010 ^b	Ratio 2016 ^c	Change 1985-2010	Change 1985-2016	Ratio 1985 ^a	Ratio 2010 ^b	Ratio 2016 ^c	Change 1985-2010	Change 1985-2016
Australia	0.917	0.868	0.877	-0.049	-0.040	0.905	0.857	0.842	-0.048	-0.064
Austria	0.953	0.909	0.902	-0.043	-0.050	0.949	0.900	0.895	-0.049	-0.054
Belgium	0.944	0.939	0.940	-0.005	-0.004	0.933	0.932	0.928	-0.001	-0.005
Canada	0.915	0.875	0.886	-0.040	-0.029	0.900	0.868	0.871	-0.033	-0.029
Denmark	0.960	0.938	0.921	-0.023	-0.039	0.958	0.924	0.901	-0.034	-0.057
Finland	0.964	0.921	0.912	-0.043	-0.051	0.958	0.905	0.895	-0.053	-0.063
France	0.842	0.887	0.872	0.045	0.030	0.841	0.877	0.868	0.036	0.027
Germany	0.929	0.896	0.887	-0.033	-0.042	0.900	0.880	0.879	-0.020	-0.021
Greece	0.830	0.877	0.865	0.047	0.035	0.822	0.862	0.862	0.040	0.040
Ireland	0.837	0.890	0.889	0.053	0.052	0.814	0.873	0.889	0.059	0.075
Israel	0.861	0.865	0.879	0.004	0.018	0.857	0.844	0.872	-0.013	0.015
Italy	0.885	0.894	0.896	0.009	0.011	0.893	0.883	0.879	-0.009	-0.014
Japan	0.879	0.892	0.885	0.014	0.007	0.882	0.866	0.861	-0.016	-0.020
Netherlands	0.867	0.889	0.925	0.022	0.059	0.853	0.876	0.911	0.023	0.058
New Zealand	0.922	0.871	0.827	-0.051	-0.095	0.898	0.849	0.811	-0.049	-0.087
Norway	0.949	0.944	0.930	-0.005	-0.018	0.945	0.933	0.921	-0.012	-0.024
Portugal	0.858	0.824	0.856	-0.034	-0.002	0.855	0.805	0.846	-0.050	-0.009
Spain	0.855	0.898	0.877	0.043	0.022	0.856	0.876	0.869	0.020	0.013
Sweden	0.944	0.933	0.902	-0.011	-0.042	0.939	0.922	0.884	-0.016	-0.055
Switzerland	0.837	0.888	0.869	0.052	0.033	0.835	0.878	0.866	0.042	0.030
United Kingdom	0.876	0.845	0.854	-0.030	-0.022	0.839	0.822	0.829	-0.017	-0.010
United States	0.892	0.835	0.821	-0.057	-0.072	0.879	0.816	0.808	-0.063	-0.071
Average	0.896	0.890	0.885	-0.006	-0.011	0.887	0.875	0.872	-0.012	-0.015
Standard deviation	0.045	0.033	0.031	0.037	0.041	0.046	0.035	0.032	0.035	0.044
Min	0.830	0.823	0.821	-0.057	-0.095	0.814	0.805	0.808	-0.063	-0.087
Max	0.964	0.944	0.940	0.052	0.059	0.958	0.933	0.928	0.059	0.075

Notes and sources: see Table 1 and Table A2.

Appendix 3: Median-to-mean income ratios with 2010 as the end year

Table A2: Median-to-mean income ratios with 2010 as the end year

Country	Working-age population (18-65 years)			Entire population		
	1985 ^a	2010 ^b	<i>Change 1985- 2010</i>	1985 ^a	2010 ^b	<i>Change 1985- 2010</i>
Australia	0.917	0.868	-0.049	0.905	0.857	-0.048
Austria	0.953	0.909	-0.043	0.949	0.900	-0.049
Belgium	0.944	0.939	-0.005	0.933	0.932	-0.001
Canada	0.915	0.875	-0.040	0.900	0.868	-0.033
Denmark	0.960	0.938	-0.023	0.958	0.924	-0.034
Finland	0.964	0.921	-0.043	0.958	0.905	-0.053
France	0.842	0.887	0.045	0.841	0.877	0.036
Germany	0.929	0.896	-0.033	0.900	0.880	-0.020
Greece	0.830	0.877	0.047	0.822	0.862	0.040
Ireland	0.837	0.890	0.053	0.814	0.873	0.059
Israel	0.861	0.865	0.004	0.857	0.844	-0.013
Italy	0.885	0.894	0.009	0.893	0.883	-0.009
Japan	0.879	0.892	0.014	0.882	0.866	-0.016
Netherlands	0.867	0.889	0.022	0.853	0.876	0.023
New Zealand	0.922	0.871	-0.051	0.898	0.849	-0.049
Norway	0.949	0.944	-0.005	0.945	0.933	-0.012
Portugal	0.858	0.824	-0.034	0.855	0.805	-0.050
Spain	0.855	0.898	0.043	0.856	0.876	0.020
Sweden	0.944	0.933	-0.011	0.939	0.922	-0.016
Switzerland	0.837	0.888	0.052	0.835	0.878	0.042
United Kingdom	0.876	0.845	-0.030	0.839	0.822	-0.017
United States	0.892	0.835	-0.057	0.879	0.816	-0.063

^a Year 1985 used, except for: Switzerland (1982); Sweden (1983); France, Italy, US (1984); Finland, Greece, Norway (1986); Austria, Ireland (1987); Portugal (1990).

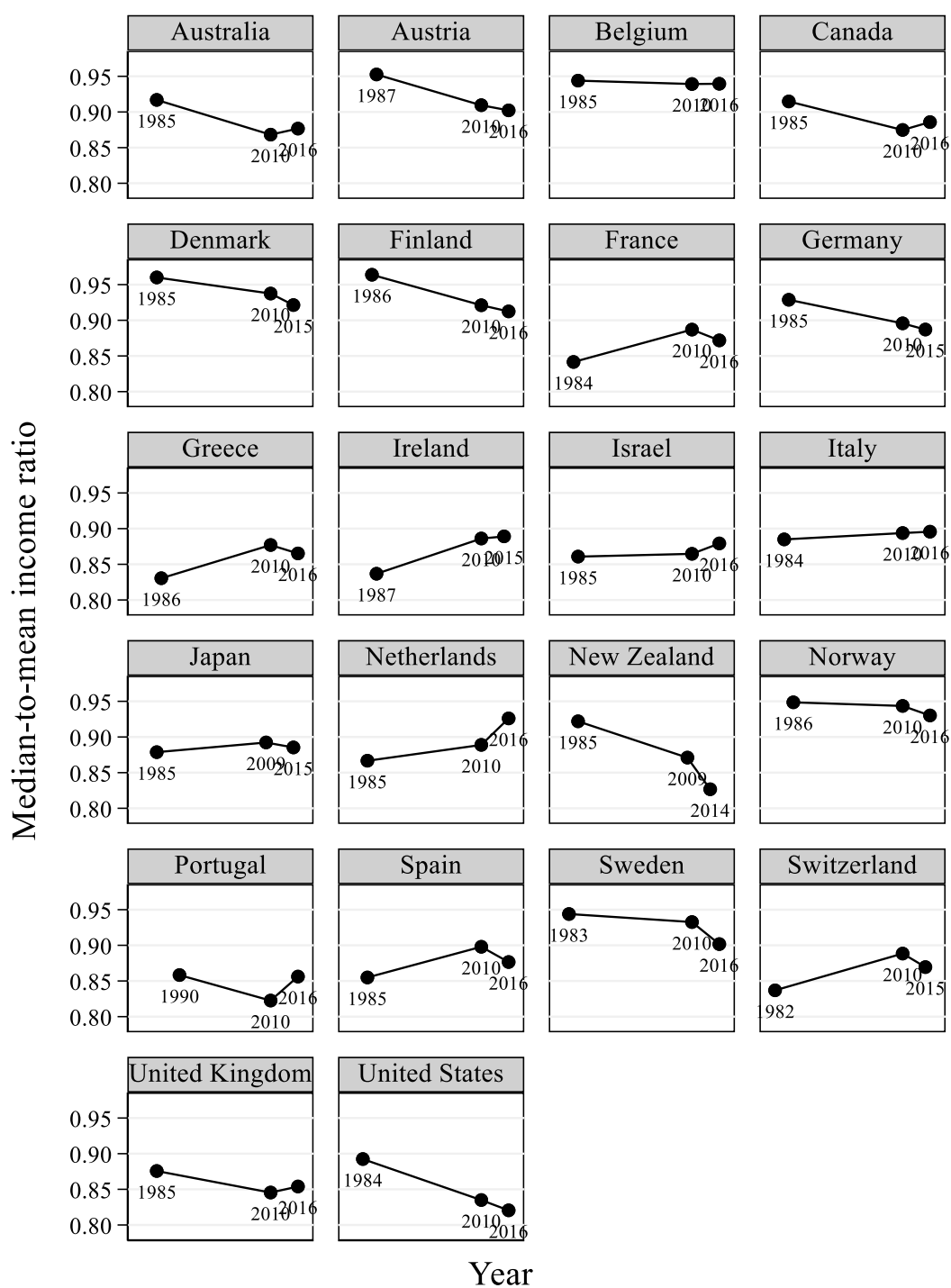
^b Year 2010 used, except for: Japan, New Zealand (2009).

Notes and sources: Income data are real disposable household incomes, adjusted for household size (square root equivalence scale) and inflation (consumer-price index, 2015=100). Data for 1985 and 2010 are from the OECD Income Distribution Database (IDD) (assessed 2019-04-09) based on the ‘old income definition’, and Luxembourg Income Study microdata (LIS 2019) for Australia, Austria, Belgium (1985 only), France, Ireland (1985), Spain and Switzerland.

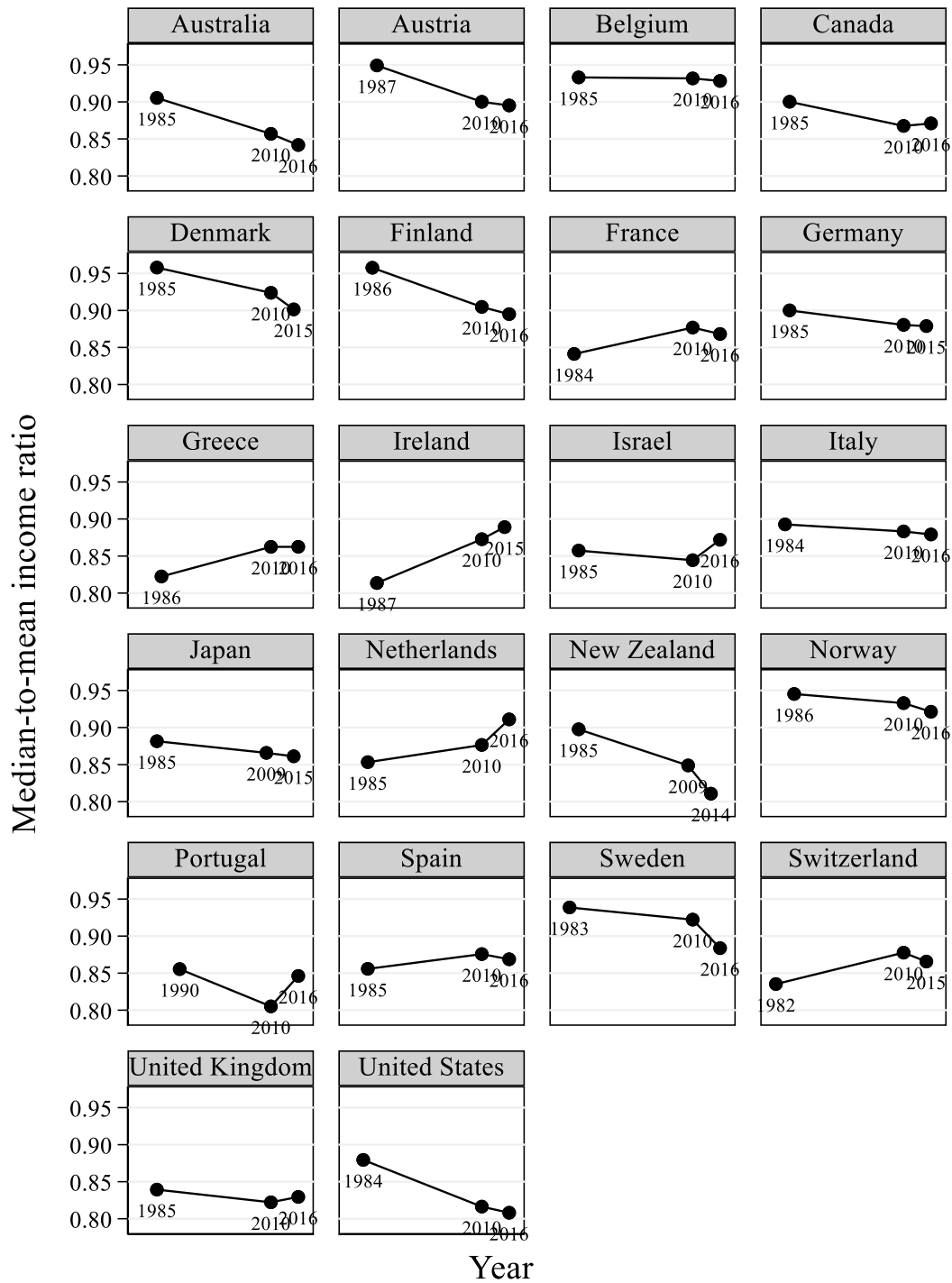
Appendix 4: Trends in median-to-mean income ratios

Figure A2: Trends in median-to-mean income ratios, 1985-2016

(a) Working-age population (18-65 years)



(b) Entire population



Notes and sources: see Table 1 and Table A2.