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The Curious Incident of Luxury Imports during the Top-Income Surge*

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Abstract

Atkinson, Piketty, and Saez [2011] find a post-1979 surge in taxfiler top income shares in "English speaking countries" (surge countries) but not in "continental European countries and Japan" (no-surge countries). We find the puzzle that Comtrade import-to-GDP ratios and import-to-total-import ratios for apparent luxuries pearls, precious stones, diamonds, works of art, jewellery, furs and coins do not increase post-1979 in surge countries relative to no-surge countries. Explanations could include issues with the taxfiler or import data or that top income individuals do not have a particularly high marginal to propensity to consume these luxury goods, at least within their own country. Overall, this is a fragment of evidence that there may not have been a large post-1979 increase in top-end domestic consumption inequality in surge countries compared to no-surge countries.

Keywords: income distribution; taxfiler data, luxury goods

JEL Codes: D12, D31, D63, F19, N30

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1 Introduction

Atkinson, Piketty, and Saez [2011] show that the top 1% share of income measured using administrative taxfiler data increased sharply in the late 1980s and 1990s in "English speaking countries" (henceforward: "surge countries") but not in "continental European countries and Japan" (henceforward "no-surge countries"). This difference had not been apparent in survey data, because of survey sampling error, top-coding and under-response by those with high incomes.

What have been the trends in consumption by those with top-end incomes? Expenditure survey data share the same flaws at the top end as income survey data and there is no comprehensive administrative expenditure microdata. As an imperfect attempt, we use the Comtrade administrative trade data set for international comparisons of imports. One might expect a higher rate of increase of imports (corrected for re-import) of "luxury" goods for those countries with a measured top income surge. We report the puzzle that there is no such pattern.

In Section 2, we provide additional context. Section 3 describes our empirical findings. In Section 4, we suggest as possible explanations either measurement issues, e.g. that top-income trends have been mismeasured by taxfiler data or that top-income individuals do not have a particularly high marginal propensity to consume these luxury goods, at least within their own countries. Regardless, our results provide a fragment of evidence that there may not have been a relative increase in top-end domestic consumption inequality in surge countries relative to no-surge countries. Section 5 concludes.

2 Context

Atkinson, Piketty, and Saez (2011, henceforward APS) summarizes a large literature (e.g. Atkinson and Piketty, 2007; Piketty, 2013 and Leigh, 2007) examining international differences in the rate of change of taxfiler top income shares across many countries. As noted in the Introduction, a principal APS finding is that some countries experienced top-income surges beginning about 1980 and some did not. Figure 1 illustrates using the top 1% income shares for the G7 countries, excepting Germany.[1,2] For each year, we compute the average of the values for Canada, the United Kingdom and the United States and then smooth these

[1] Data are from the World Inequality Database (Alvaredo, Atkinson, Piketty, and Saez [2012]) for 1962 to 2014, as available. Income is market income either per tax unit or per adult without capital gains (except for the U.K. prior to 1965, when they are unavoidably included).

[2] APS included Germany as a no-surge country based on the data of Dell [2007] which has little evidence of a surge up to its endpoint of 1998. But we omit Germany because more recent estimates in the World Inequality Database suggest a significant surge since 1998 and the alternative estimates of Bach, Corneo, and Steiner [2009] suggest there was an earlier top-end surge, concentrated at the very top, a finding with some support in the case of German CEOs in Fabri and Marin [2016] and in wage data in Dustmann, Johannes, and Schonberg [2009]

averages over time.[3] The top-income surge found by APS for these countries is clear. When the same calculation is performed for France, Italy and Japan, there is clearly no surge, again consistent with the APS finding for these countries.

3 Luxury Imports

The longest available Comtrade data series (Standard International Trade Classification, Revision 1) are available from 1962 to 2014. We study the following apparent luxury goods: pearls, not set or strung (SITC 6671); other precious & semi precious stones not set (SITC 6673)); diamonds, not industrial, not set or strung (SITC 6672); works of art, collectors, pieces and antiques (SITC 8960); gold, silver and platinum jewellery less watchcases (SITC, 8971); fur clothing (SITC 8420); and coin, other than gold, not being legal tender (SITC, 9610). We aggregate these annually for each country using U.S. dollar values and graph over time each import aggregate by country as fraction of that countr's GDP.

Even with a log scale, the resulting Figures 2 to 8 are somewhat noisy. But when we calculate smoothed averages in the same manner as in Figure 1, it is clear that despite the various idiosyncratic shocks for the different luxury goods, if anything the no-surge countries France, Italy and Japan had a larger average increase in the import-to-GDP ratios since 1980 than did the surge countries Canada, the U.K. and the U.S. Specifically while measured top incomes were increasing sharply post-1979 in surge countries, the Figures show that the import-to-GDP ratios (a) for pearls declined slightly for all countries except there was an increase in Japan, a no-surge country (b) for precious stones mostly declined, with the sharpest falls for surge country Canada and no-surge Japan (c) continued at higher levels for the surge countries U.S. and U.K. for diamonds, works of art and jewellery, but with no differential trends between the surge and no-surge countries except perhaps for jewellery, where the no-surge country trend appears greater (d) for furs declined uniformly with some rebound in the no-surge countries and (e) fell erratically for coins, but with a sharper initial fall in surge countries followed by no differential trend in the averages.

While not included for brevity, we find similar graphical results for import-to-total-import ratios and when other APS surge and no-surge countries are included. We also have estimated a number of regressions using various sets of surge and no-surge countries, all yielding results consistent with our graph-based discussion here. Simple examples are difference-in-difference regressions with import-to-GDP ratios as the dependent variables and as right-hand-side variables an intercept, a surge country dummy, a post-1979 dummy and an interaction of the two dummies. The coefficient of the last variable is an estimate of the post-1979 change in mean import ratios for surge as compared to no-surge countries. Table 1 shows these coefficients for the sample of countries in Figure 1 are always negative in sign and sometimes even statistically significant. Hence, the post-1979 top-income surge

[3] Smoothing is done using the LOESS procedure in R, with 95% confidence intervals added.

appears to be associated with if anything a smaller rather than a larger post-1979 increase in luxury import ratios in those countries that had it in comparison to those countries that did not. While not reported here, this result holds under a number of changes, such as when the break year is changed from 1980 to 1983 or 1985, when the import ratio denominator is changed to total imports from GDP, when GNI is used instead of GDP or when different countries are added.

Table 1: Difference-in-Difference Coefficient Estimates of Differential Effects of Top-Income Surge on Import Shares of Surge Countries, 1962-2014 (unbalanced panel)

	Dependent variable:						
	Pearls	Precious	Diamonds	Art	Jewellery	Fur	Coins
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-0.554^{***}	-0.285	-0.709^{**}	-0.320	-0.144	-0.846^{***}	-2.407^{***}
	(0.205)	(0.196)	(0.296)	(0.259)	(0.182)	(0.205)	(0.710)
Observations	281	280	279	282	282	282	251

*p<0.1; **p<0.05; ***p<0.01

Note: Sample contains same countries as Figure 1

4 Possible Explanations

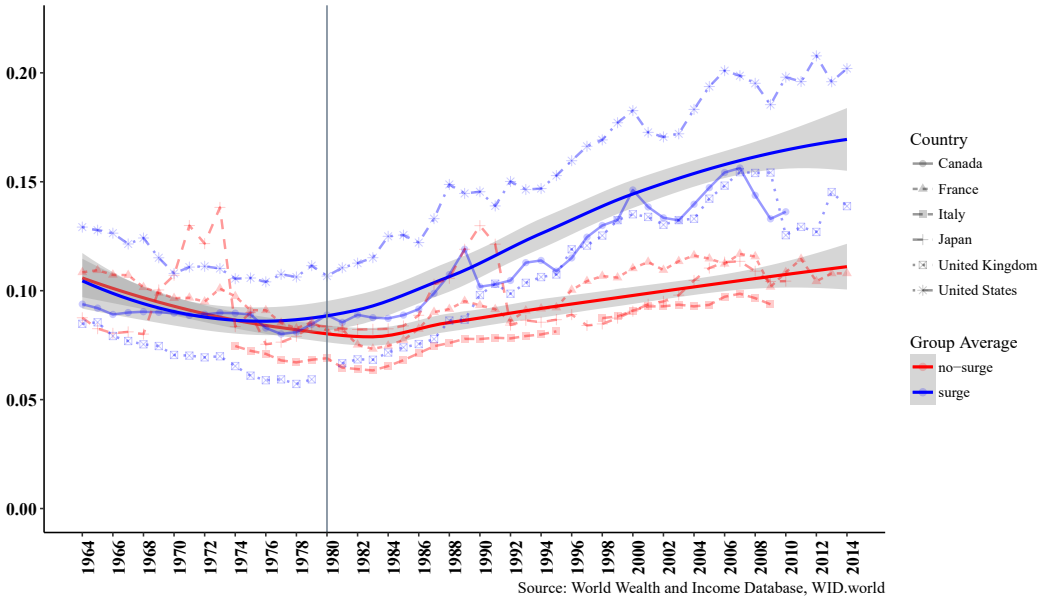
It is possible that the import data are inadequate to the task, although we find it striking that the results are so consistent across the imported goods. It is also possible that the surge has been overestimated in the countries we call surge countries or underestimated in the no-surge countries, in the latter case perhaps because of misreporting in income tax filings.[4] The other explanation is that there really was a differential surge but that high-income individuals in surge countries do not have a particularly high marginal propensity to consume these luxury goods, at least domestically. The possibility remains that they purchase these goods in other countries, perhaps in small tax havens (a proposition we have been unable to test because of data quality issues).

[4]It is disputed that the U.S. top income surge is as large as indicated by Figure 1, based on the World Inequality Database. Saez and Veall [2005] and Veall [2012] argue that the Canadian surge was in part caused by, and hence indirectly provides evidence of, a U.S. surge. But others e.g. Armour, Burkhauser, and Larrimore [2013] and Auten and Splinter [2017] find that the measured U.S. surge is smaller when different definitions of income are used that incorporate in-kind government transfers and accommodate changes in U.S. tax law..

5 Conclusions

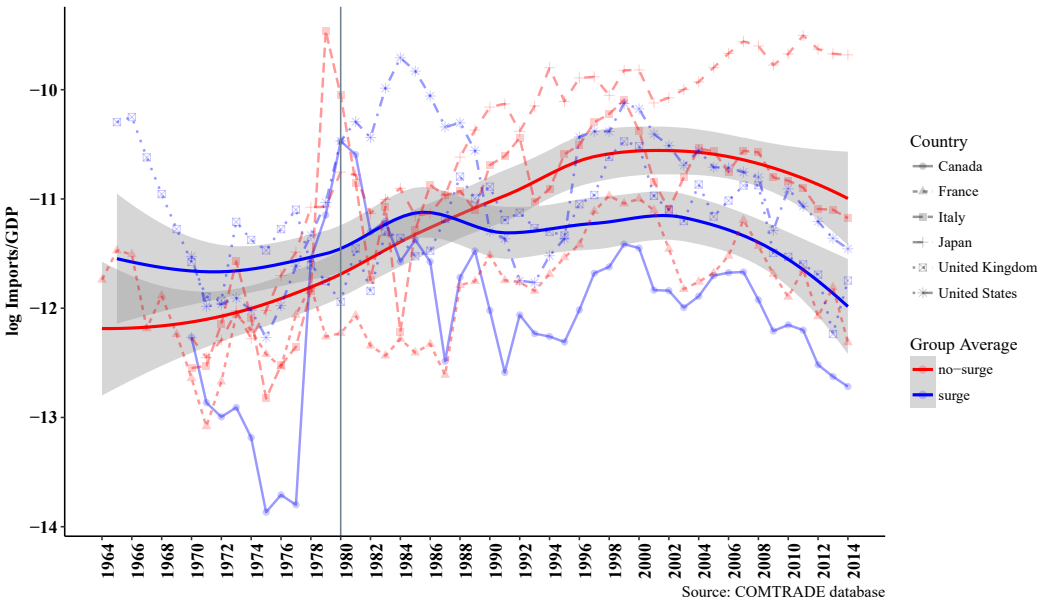
The "curious incident" in our title refers to a Sherlock Holmes case where something should have happened (the dog should have barked) but did not. For countries where Atkinson, Piketty, and Saez (2011, APS) found post-1979 top-end income surges using tax-filer data, we expected to find sharp increases in imports of luxury goods pearls, precious stones, diamonds, works of art, jewellery, furs and coins. But we found no evidence that the ratio of the value of these imported goods either to GDP or to total imports increased relative to those countries for which APS found no surge. This might suggest issues in import or top-income measurement in either surge or no-surge countries or it might indicate that the domestic marginal propensity to consume these luxury goods by top-income individuals in surge countries is not particularly large. Regardless this is a fragment of evidence that there may not have been a large post-1979 increase in top-end domestic consumption inequality in countries with a top-end surge in taxfiler-reported income as compared to those countries that did not have a surge.

Figure 1: Top 1% income shares by countries



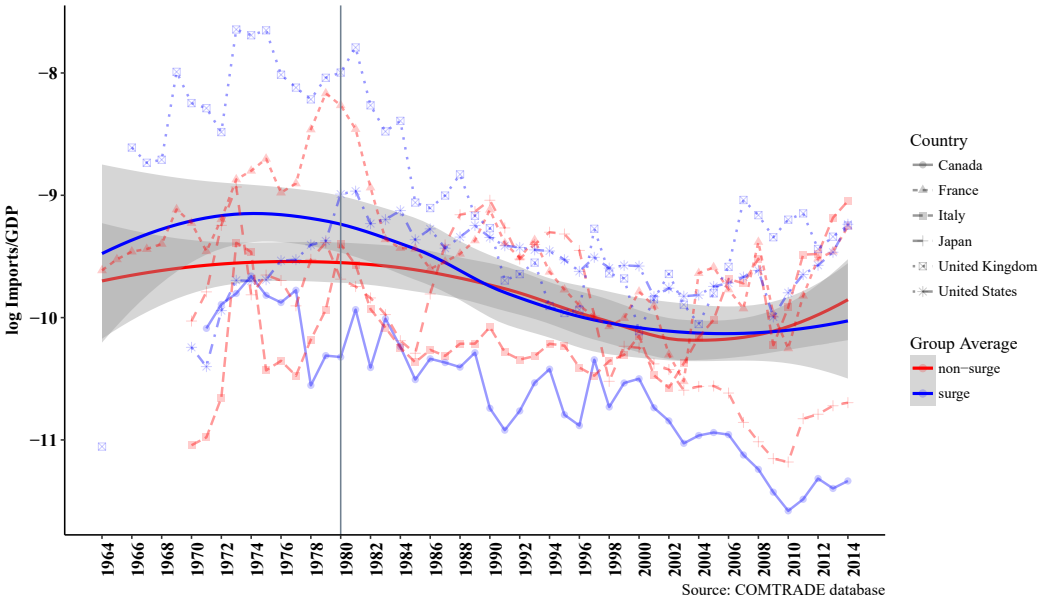
Source: World Wealth and Income Database, WID.world

Figure 2: Pearls,not set or strung



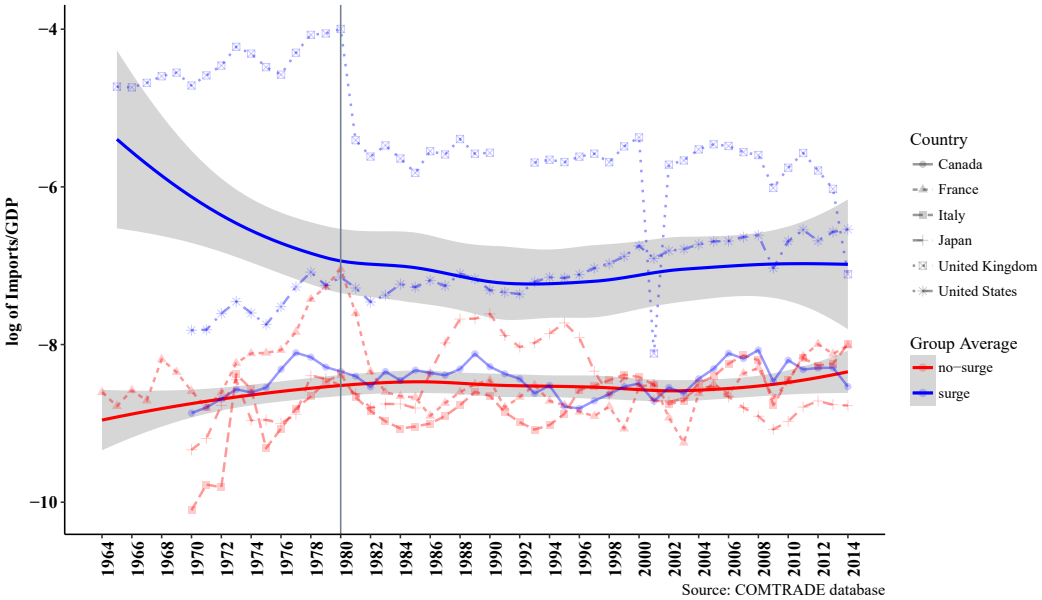
Source: COMTRADE database

Figure 3: Other precious & semi precious stones not set



Source: COMTRADE database

Figure 4: Diamonds,not industrial,not set or strung



Source: COMTRADE database

Figure 5: Works of art,collectors pieces

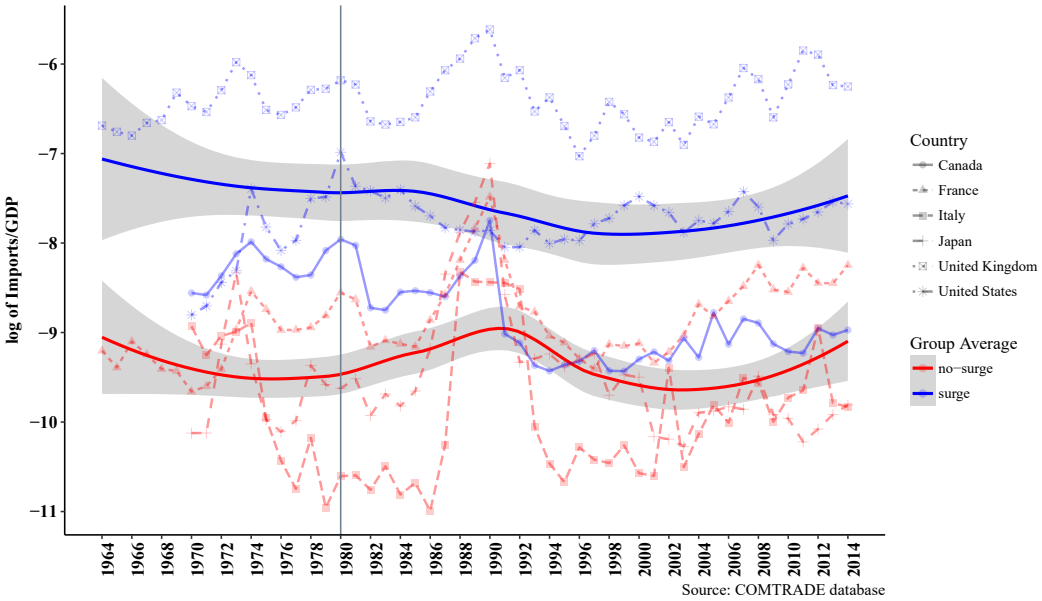


Figure 6: Gold, silver and platinum jewellery less watchcases

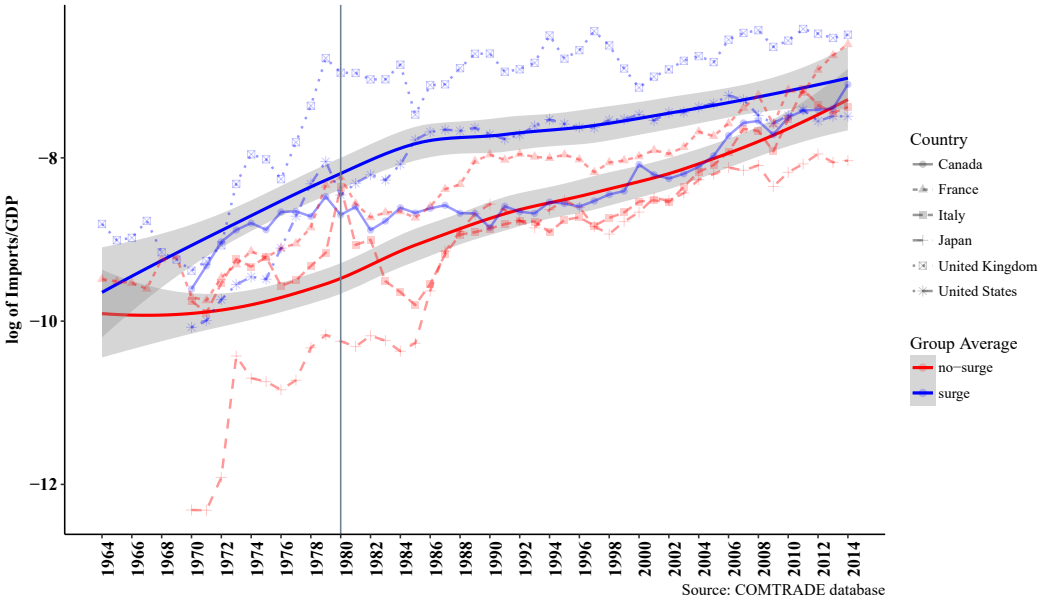


Figure 7: Fur Clothing

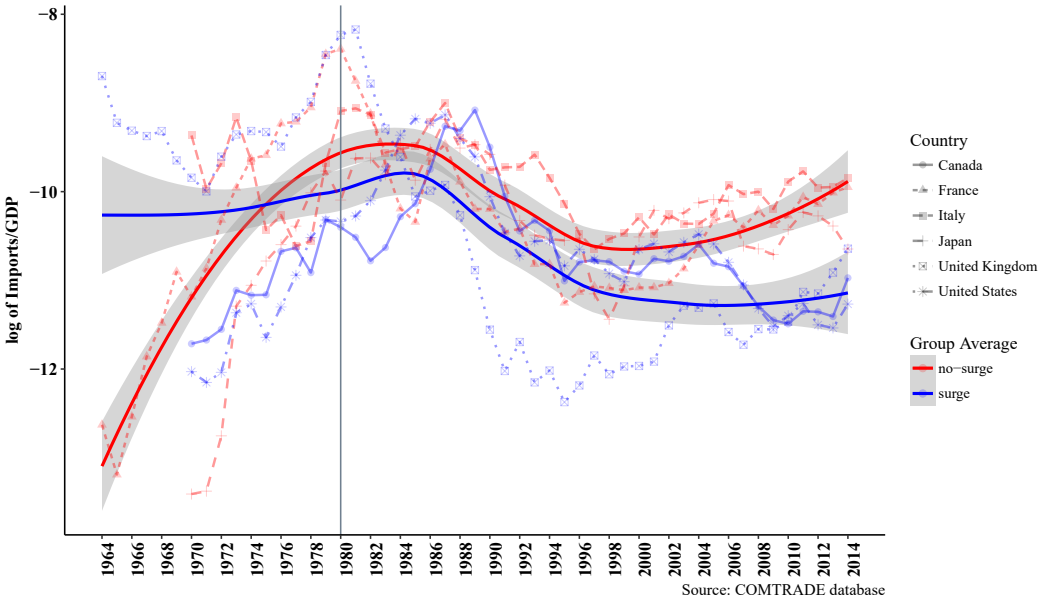
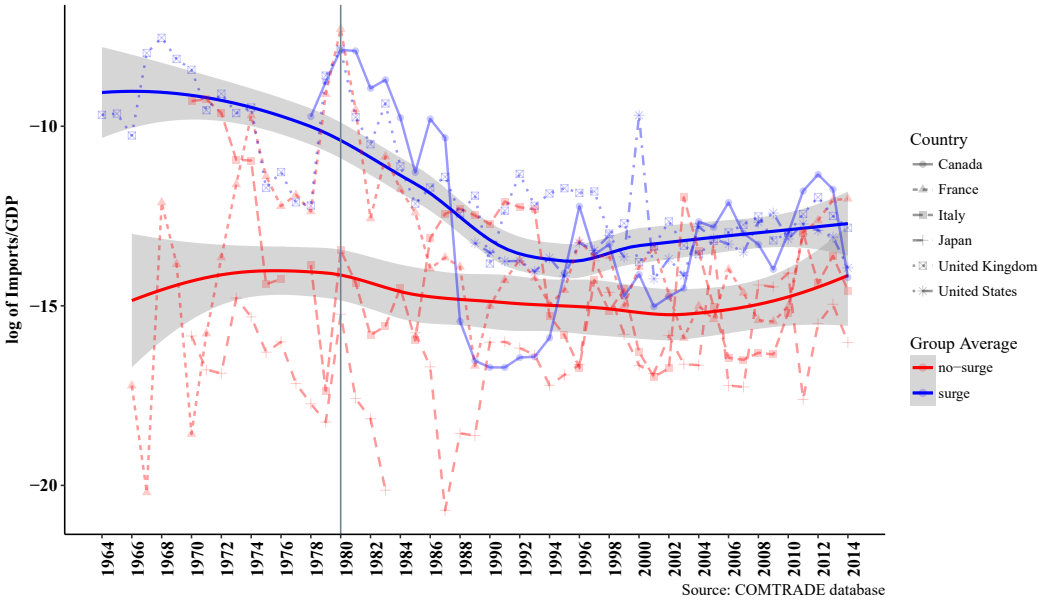


Figure 8: Coin, other than gold, not being legal tender



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