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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). Working at a similarly high level of abstraction, we find the puzzle that import-to-GDP ratios and import-to-total-import ratios for 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 potential flaws in the taxfiler or import data, or that top income individuals do not have a particularly high marginal propensity to import these luxury goods. Overall, we believe that 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.

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1 Introduction

Atkinson, Piketty and Saez (2011, henceforward APS) 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 also suffer from sampling error, top-coding and top-end under-response but there is no comprehensive administrative expenditure microdata. As an imperfect attempt, we use the UN Comtrade (2018) administrative trade data set for international comparisons of imports. Working at the same level of graphical abstraction as APS and hence ignoring other factors which might affect consumption patterns, one might expect a larger increase in luxury imports as a ratio of output or of incomes or of total imports for those countries with a measured top income surge. We report the puzzle that there is no such pattern.¹

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 imported luxury goods. Regardless, we believe that this is 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

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.^{2, 3} For each year, we compute the average of the values for Canada, the United Kingdom and the United States and then smooth these averages

¹Of course aggregation considerations in standard consumption models make it technically possible that a redistribution of income towards the top can lead to either an increase or a reduction in the luxury share of consumption, but we believe that most economists would find the latter outcome surprising.

²Data are from the World Inequality Database (Alvaredo et al., 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).

³APS 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 (2015) and in wage data in Dustmann, Johannes and Schonberg (2009).

over time.⁴ 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 (2018) data series (Standard International Trade Classification, Revision 1) starts as early as 1962. We study the following 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 a fraction of that country'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 the following regarding the import-to-GDP ratios. First, the ratio for pearls declined slightly for all countries except there was an increase in Japan, a no-surge country. Second, the ratio for precious stones mostly declined, with the sharpest falls for surge country Canada and no-surge Japan. Third, the ratios for diamonds, works of art and jewellery continued at higher levels for the surge countries U.S. and U.K., but with no differential trends between the surge and no-surge countries except perhaps for jewellery, where the no-surge country trend appears greater. Fourth, the ratio for furs declined uniformly with some rebound in the no-surge countries. Finally, the ratio 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, but included in our working paper Houle, Pujolas and Veall (2018), 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 I shows these coefficients for the sample of countries in Figure 1 are always negative (i.e. "incorrectly" signed for a luxury good) and sometimes even statistically significant. Hence, the post-1979 top-income surge appears to be associated with, if anything, a smaller rather than a larger

⁴Smoothing is done using the LOESS procedure in R, with 95% confidence intervals added.

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, but included in our working paper Houle, Pujolas and Veall (2018), this result holds under a number of changes, such as when the break year is changed from 1980 to 1983 or 1985 to account for increases in imports potentially lagging gains in income. When the dependent variable is changed to luxury imports-to-total imports, luxury imports to GNI, or nominal imports in non-ratio form, there is still no evidence of import increases in surge countries relative to non-surge countries.

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

<i>Dependent variable:</i>						
Pearls	Precious	Diamonds	Artwork	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)
N	281	280	279	282	282	251

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

Note: 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 all the goods studied. It is also possible that the top-income 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.⁵ Other explanations are that there really was a differential surge but that high-income individuals in surge countries do not have a particularly high marginal propensity to import these luxury goods, perhaps because of consumption of luxury services or the acquisition of assets.⁶ There is always the possibility that they purchased these goods in other countries, perhaps in small tax havens (a proposition we have been unable to test because of data quality issues).

Regardless this is some evidence that there was not a large post-1979 increase in top-end domestic consumption inequality in countries APS find to have experienced top-end income surges relative to those where APS find no surge.

⁵See Auten and Splinter (2017) who argue empirically and somewhat controversially that the true U.S. top-income surge is much smaller than the APS taxfiler evidence would suggest, largely because changes in tax legislation changed tax reporting behaviour. However, Saez and Veall (2005) and Veall (2012) find a substantial Canadian surge and argue that the most likely determinant is a substantial U.S. surge.

⁶A reviewer notes that a decline in conspicuous luxury good consumption has been put forward by, among others, Currid-Halkett (2017).

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 expect to find increases in the ratio of luxury imports to GDP or luxury imports to total imports relative to those countries for which APS found no surge. But we found no evidence of this for pearls, precious stones, diamonds, works of art, jewellery, furs and coins.

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 import these luxury goods by top-income individuals in surge countries is not particularly large. It is possible that luxury consumption increased in these surge countries without an import effect, perhaps in the form of domestic luxury goods or luxury services. 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

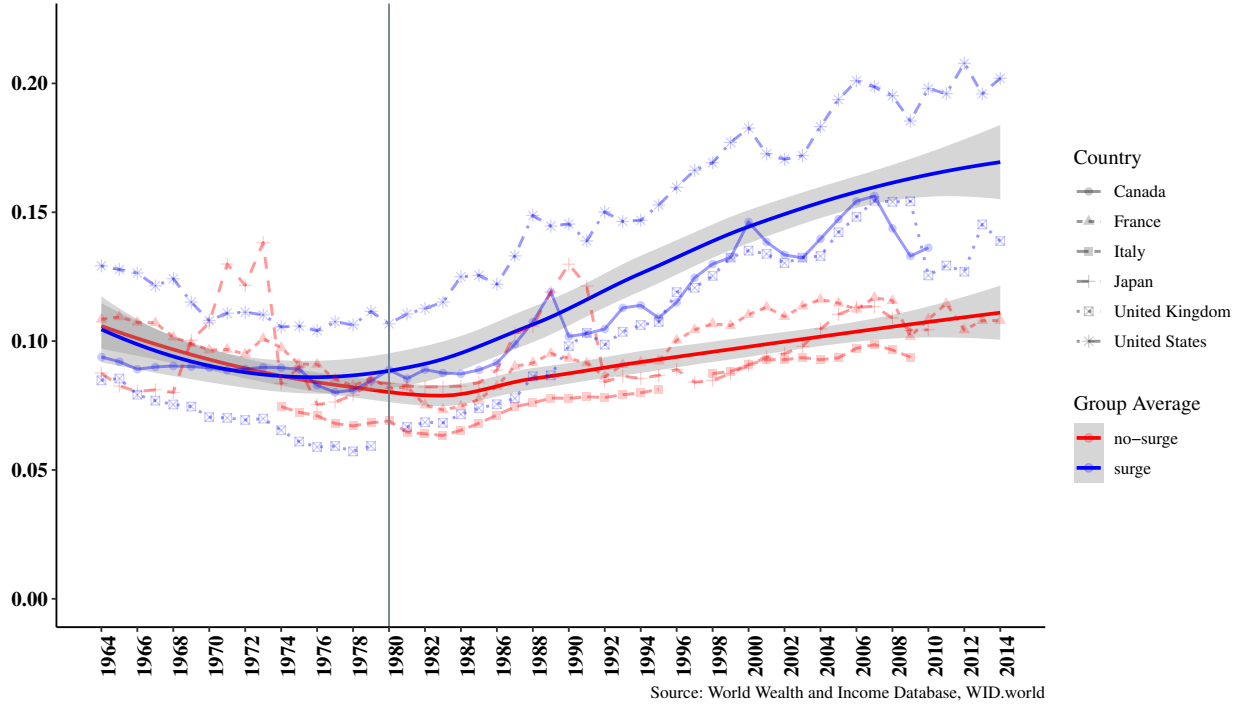


Figure 2: Pearls, not set or strung

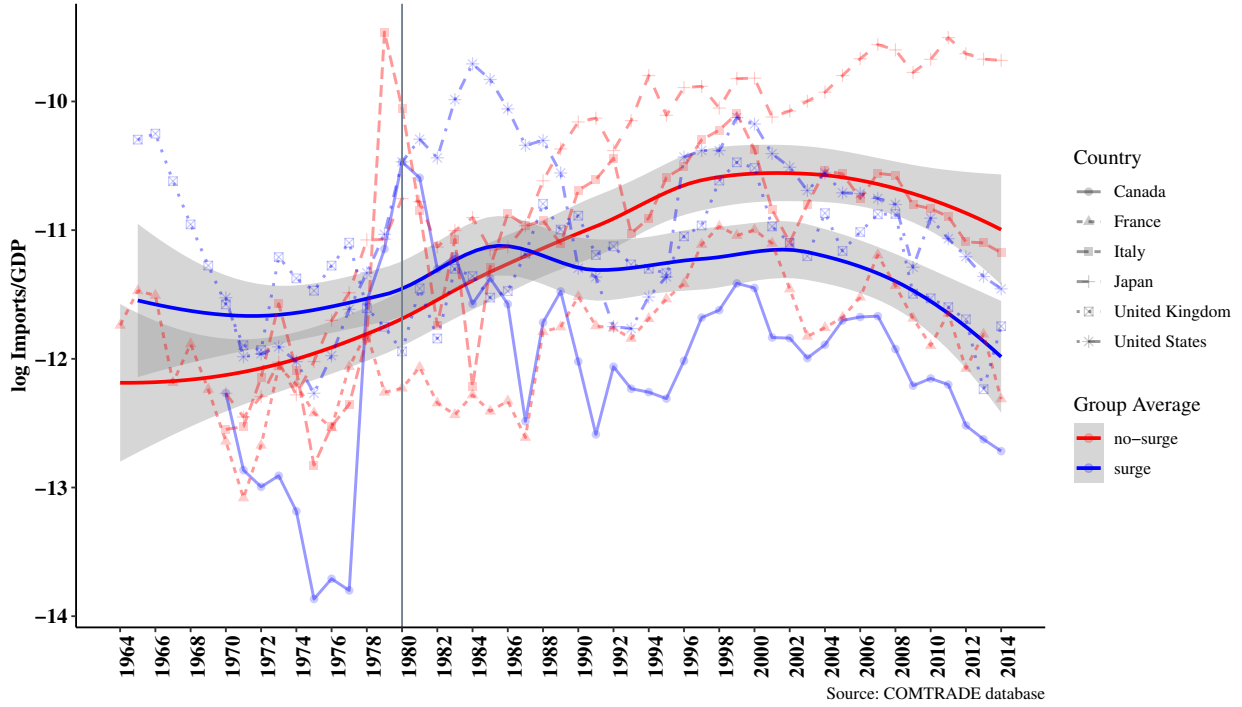


Figure 3: Other precious & semi precious stones not set

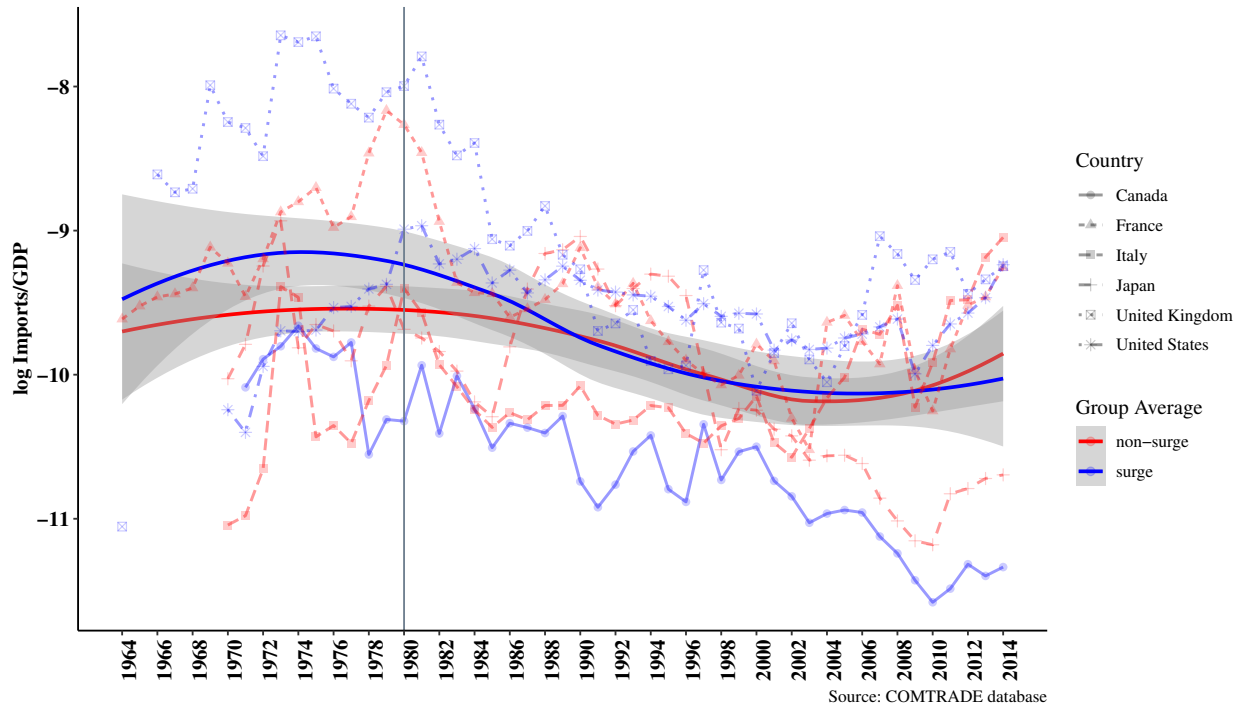


Figure 4: Diamonds, not industrial, not set or strung

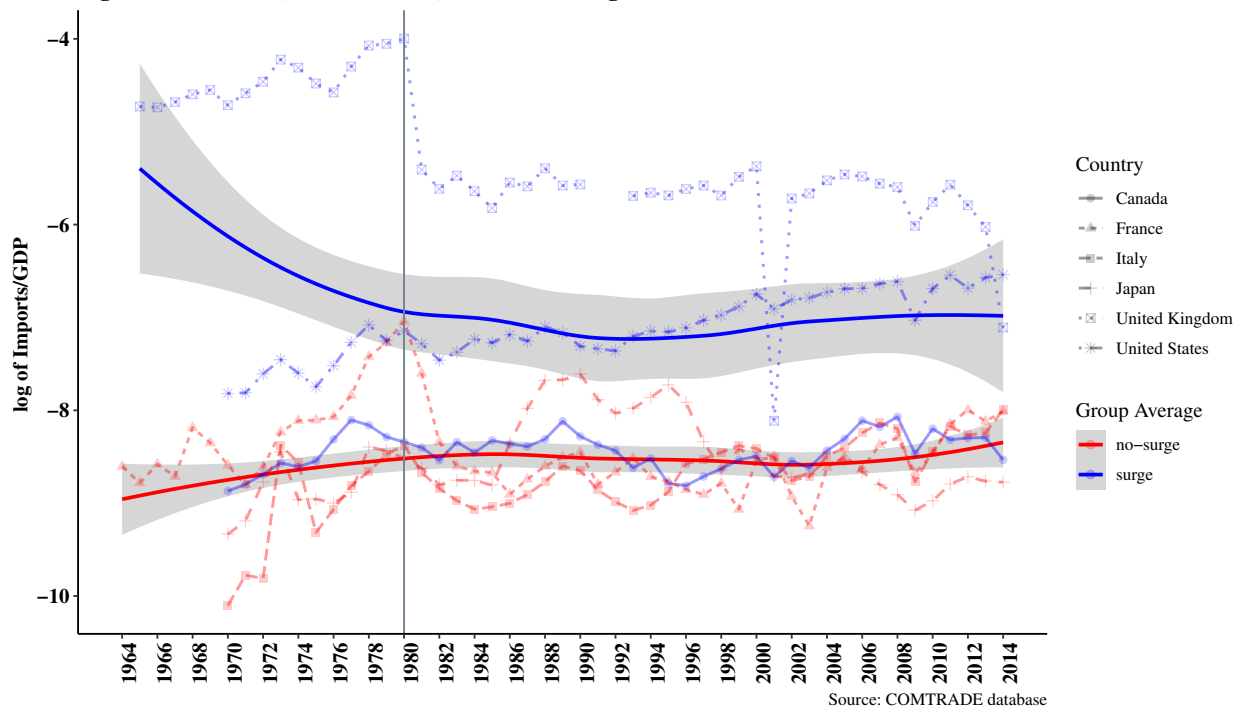


Figure 5: Works of art, collectors pieces

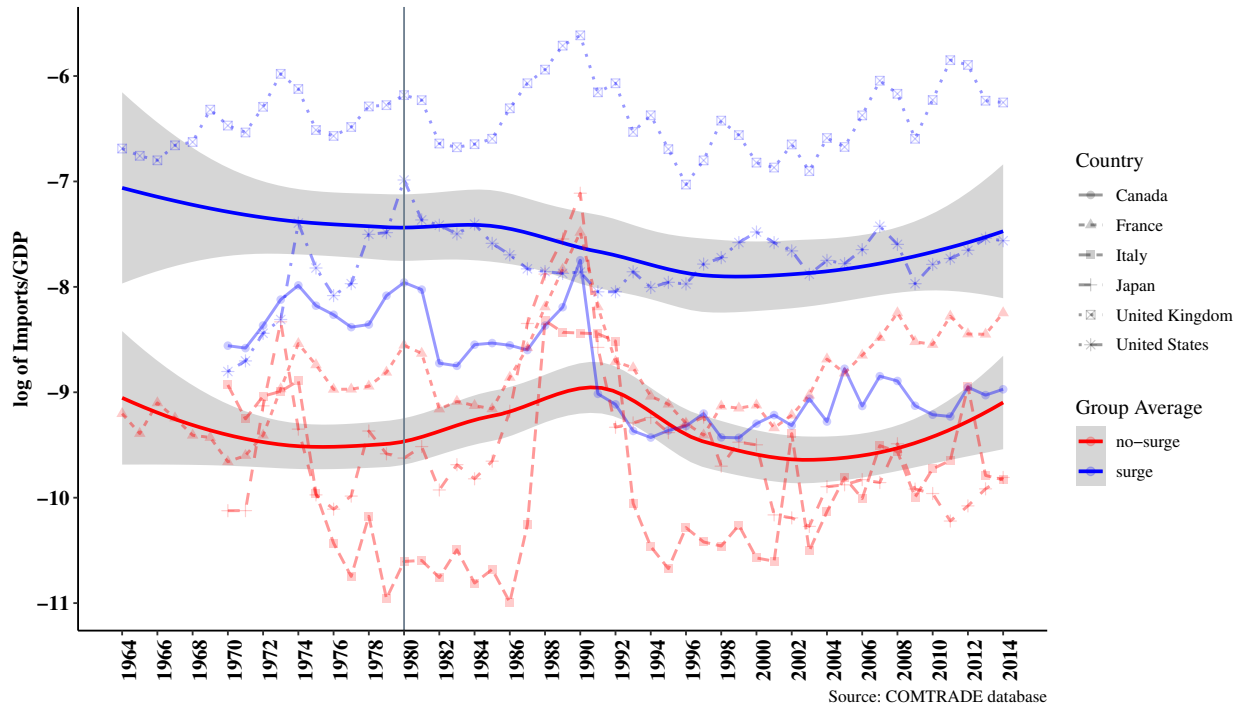


Figure 6: Gold, silver and platinum jewellery less watchcases

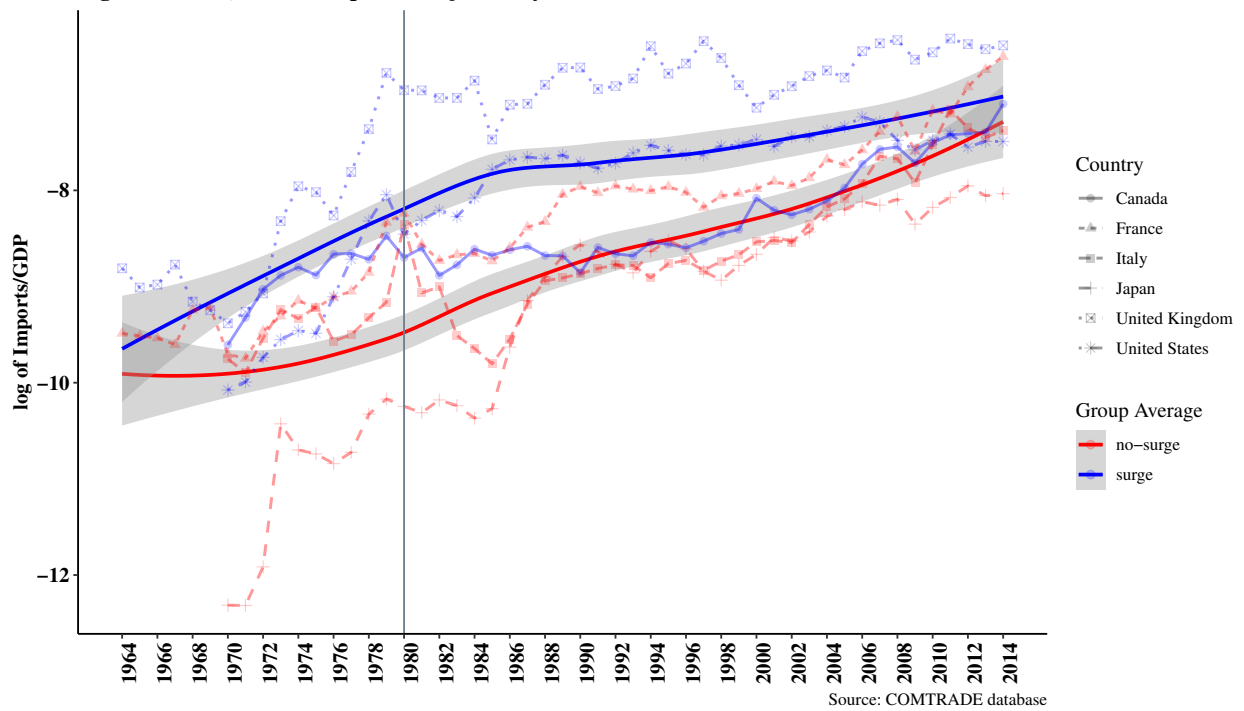


Figure 7: Fur Clothing

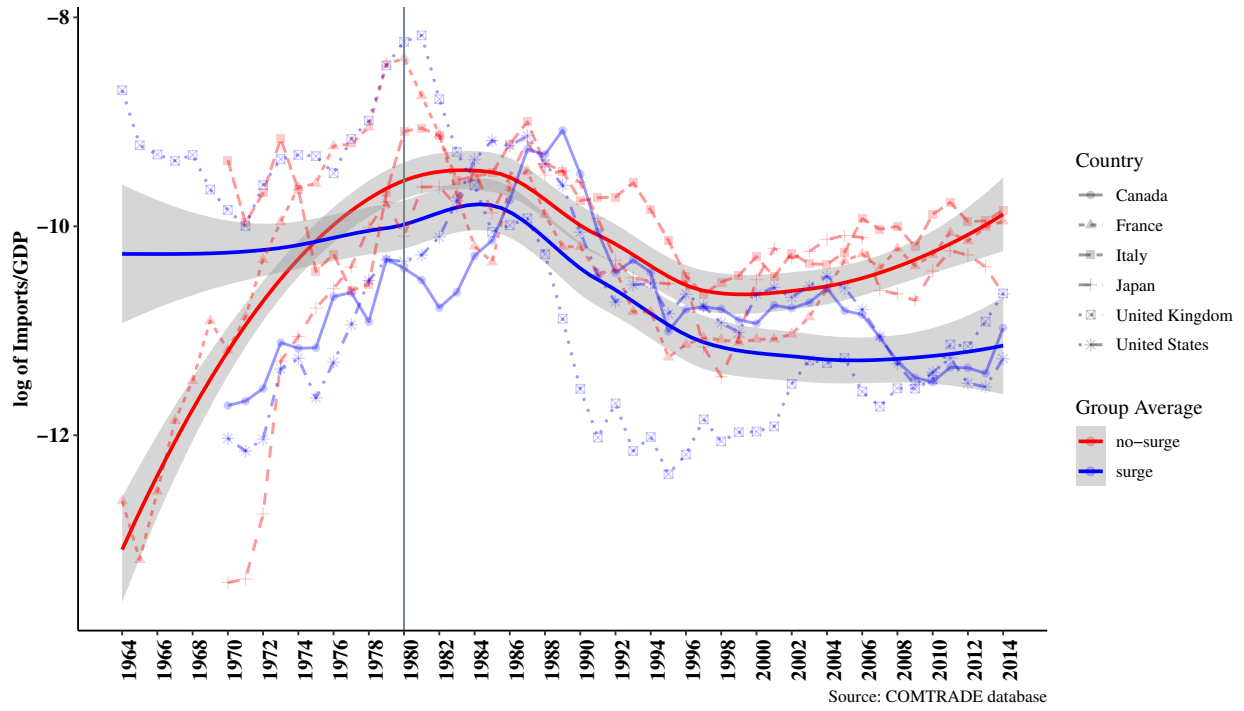
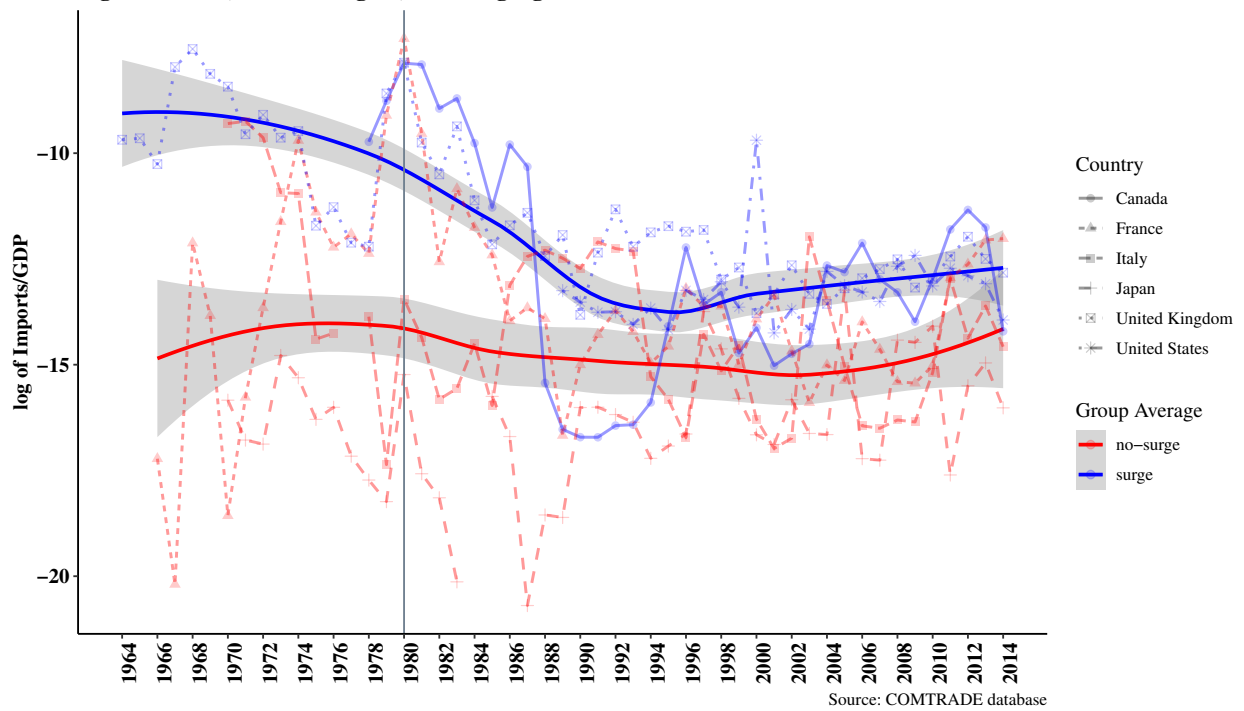


Figure 8: Coin, other than gold, not being legal tender



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