

The Model T

ONLINE APPENDIX

A Diffusion of motor vehicles, telephones, and radios relative to current levels and relative to the U.S.

It can be informative to think about adoption rates relative to current levels. The two tables below (tables [A.1](#) and [A.2](#)) do this. Table [A.1](#) shows per capita ownership of motor vehicles, telephones and radios in each country relative to the current level. For motor vehicles, we use data on 2020 per-capita ownership and for telephones we use data on ownership in 2000, since ownership has fallen since then with cell phones replacing landlines. In table [A.1](#), the number for Canada for 1929 for motor vehicles, for instance, is the number of motor vehicles per capita in 1929 divided by the number of motor vehicles per capita in Canada in 2020 (multiplied by 100). Thus this table show how far along their diffusion curve each country was; we see that in 1929, Canada had 17 percent of its eventual 2020 level of per capita vehicle ownership.

Measuring current (steady-state) radio ownership is tricky, since radios are ubiquitous in all developed countries, and since [Palgrave Macmillan, ed. \(2013\)](#) provides no comparable data on radio ownership in the U.S. (The data for the U.S. is the number of households with a radio, rather than the number of radios.) Absent a better alternative, we assume that the current level of radio ownership is one radio per person in all countries.

Table [A.2](#) divides each number in table [A.1](#) by the U.S. number; i.e. it tells one how far along the diffusion curve a country was relative to how far along the U.S. was on its diffusion curve. Thus the number for Canada in 1929 is 66, since Canada in 1929 had 17 percent of its 2020 level of vehicle ownership, and the U.S. had 25 percent. Since we make the assumption that radio ownership is currently the same across countries, the radio column in table [A.2](#) is the same as that in table [1](#) in the paper.

Together, tables [A.1](#) and [A.2](#) are consistent with our story; relative to current (steady-state) levels, the U.S. generally had a larger lead in motor vehicle ownership than in telephone or radio ownership. Adjusting for current steady-state levels leaves results qualitatively unchanged, since the differences in ownership across countries now are small relative to the differences before World War II. Today (in 2020), for instance, the U.S. has 22 percent more vehicles per capita than France whereas in 1929 it had 595 percent more.¹

¹Vehicles per capita in 2020 are from the [International Organization of Motor Vehicle Manufacturers](#); vehicles per capita in 1929 - see note to table [1](#).

Table A.1 – Share of recent per capita level (%)

	Motor vehicles		Telephones		Radios
	1913	1929	1913	1929	1929
United States	1	25	15	25	9
Australia		12	4	14	5
Canada	1	17	9	20	4
Denmark	0	5	6	14	10
France	0	4	1	4	4
Germany	0	1	4	8	5
Italy	0	1	1	2	1
Japan	0	0	1	2	1
Netherlands	0	2	2	6	2
New Zealand	0	14	7	23	4
Norway	0	2	5	9	3
Switzerland	0	3	4	9	2
UK	1	5	3	7	7

Notes: Columns show per the per-capita level in 1913 / 1929 divided by the per-capita level in 2020 for motor vehicles and in 2000 for telephones. For radios, [Palgrave Macmillan, ed. \(2013\)](#) provides no good, comparable data on radio ownership in the U.S. So instead we assume that the current level is one radio per person in all countries. Sources: For data and notes on the 1913 and 1929 data, see the notes to table 1 in the paper. 2020 motor vehicle per capita data are from the [International Organization of Motor Vehicle Manufacturers](#); data on telephone ownership in 2000 is from [Palgrave Macmillan, ed. \(2013\)](#). Population data (for calculating telephone ownership per capita) is from [Bolt et al. \(2020\)](#).

Table A.2 – Share of recent per capita level / U.S. share of recent per capita level (%)

	Motor vehicles		Telephones		Radios
	1913	1929	1913	1929	1929
Australia		46	28	57	57
Canada	59	66	61	82	48
Denmark	14	20	37	55	114
France	31	18	9	18	42
Germany	12	6	24	33	55
Italy	6	3	4	8	7
Japan	0	1	5	9	12
Netherlands	7	8	14	24	23
New Zealand	32	53	46	92	41
Norway	3	9	33	38	31
Switzerland	16	11	24	38	24
UK	48	19	19	28	79

Notes: The numbers in this table are the share of each country’s recent per-capita level in 1913 / 1929 divided by the U.S. share of its recent per capita level. Thus each number in the table is the corresponding number in table A.1 divided by the U.S. number in table A.1. Sources: See the notes to table A.1.

B Maps of Model T prices across countries

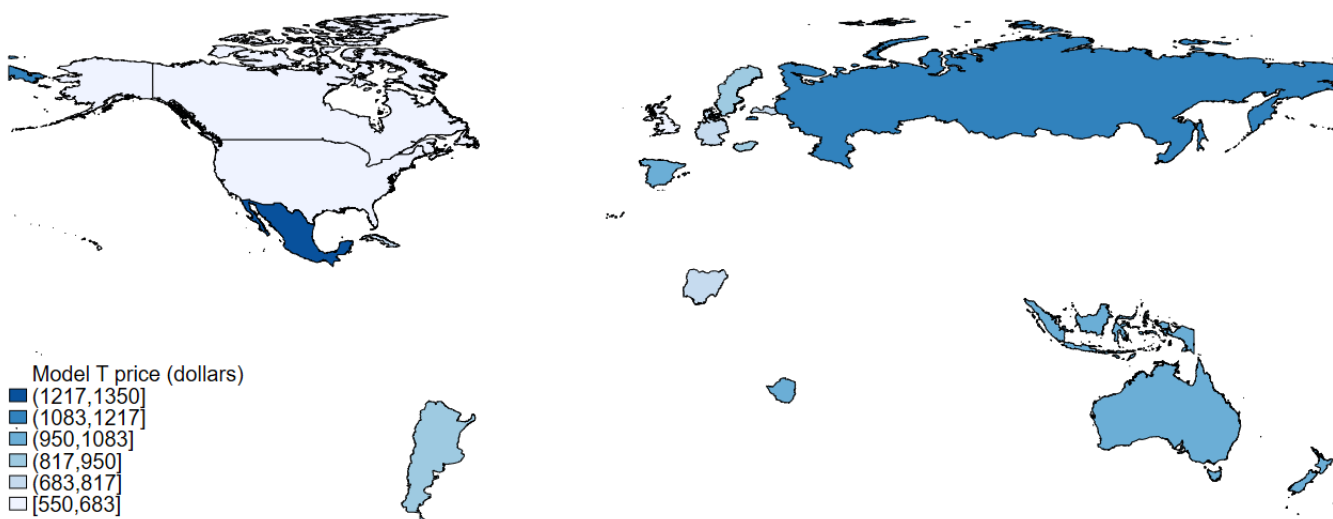


Figure B.1 – 1914



Figure B.2 – 1922

The Model T prices are from tables 5 and 6. Note that country borders are current, not those existing in 1914/22.

References

- Bolt, Jutta, Robert Inklaar, Herman de Jong, and Jan Luiten van Zanden, "Maddison Project Database, version 2020," 2020.
- Palgrave Macmillan, ed., *International Historical Statistics*, Palgrave Macmillan, 2013. Table F6, "Motor vehicles in Use".