

# The Mechanics of Endogenous Innovation and Growth: Evidence from Historical U.S. Patents

## Quantitative Results

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### 25% subsidy on new technologies for 50 years

	No Subsidy	Subsidy	% Change
<b>Welfare</b>	-0.00010682	-0.00010651	0.0029081
<b># technologies</b>	65084	79188	0.2167
<b>Average GDP growth</b>	0.021318	0.021767	0.021077

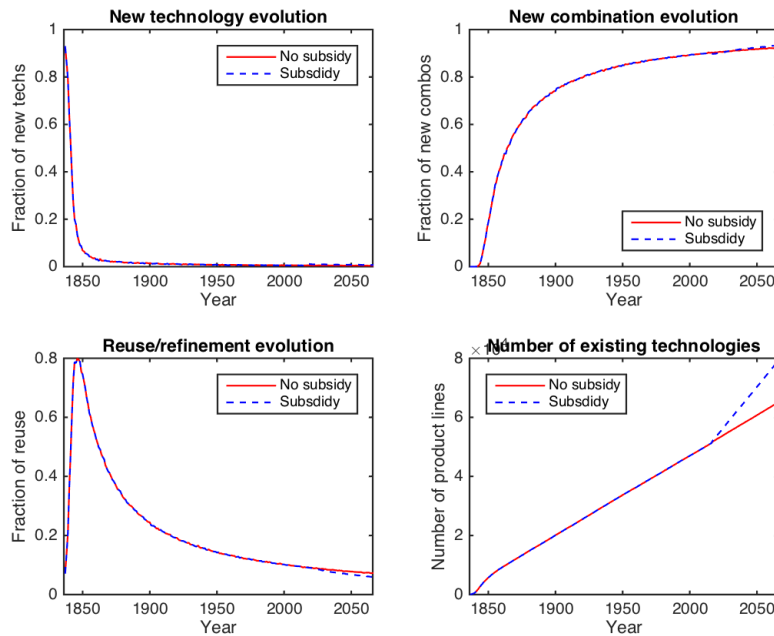


Figure 1: Evolution of patent shares across the whole period

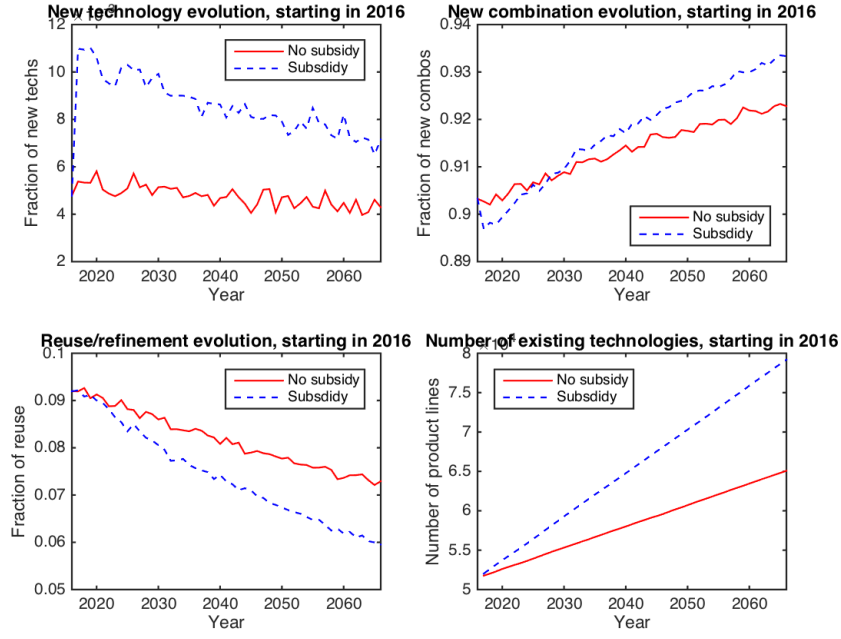


Figure 2: Evolution of patent shares, starting in 2016

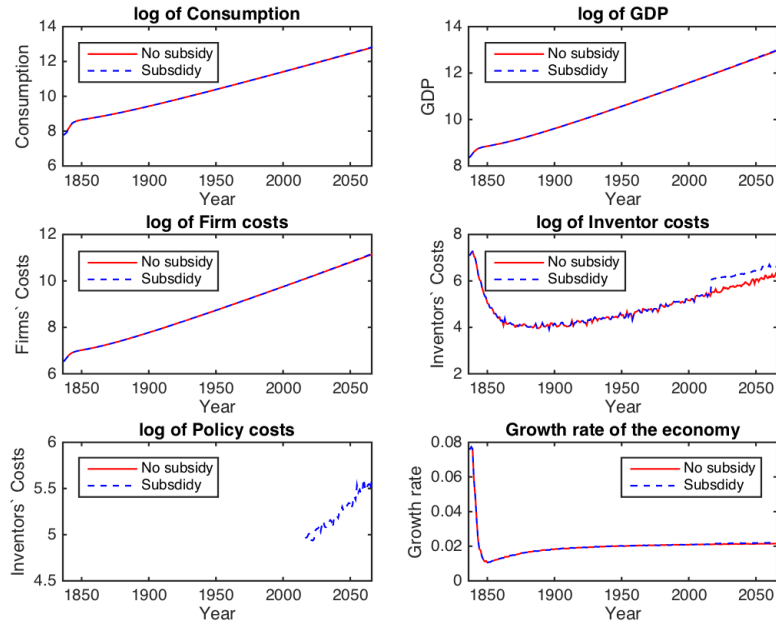


Figure 3: Evolution of aggregate variables over the whole period

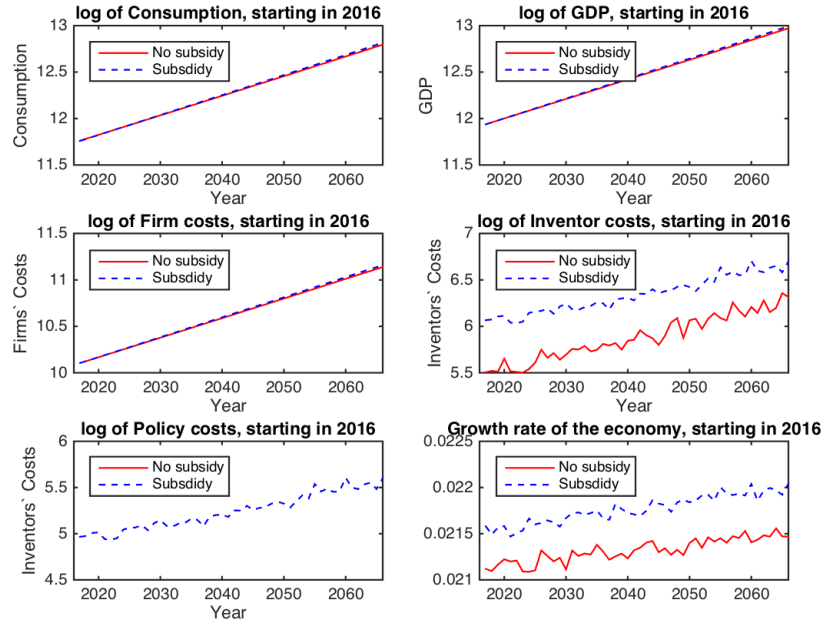


Figure 4: Evolution of aggregate variables starting in 2016

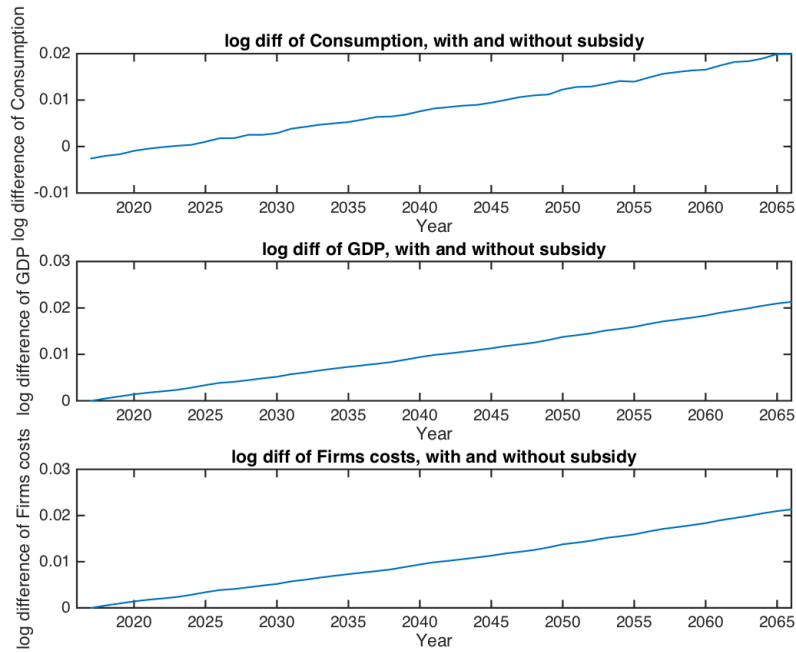


Figure 5: Log difference of variables, with subsidy - without subsidy, starting in 2016.

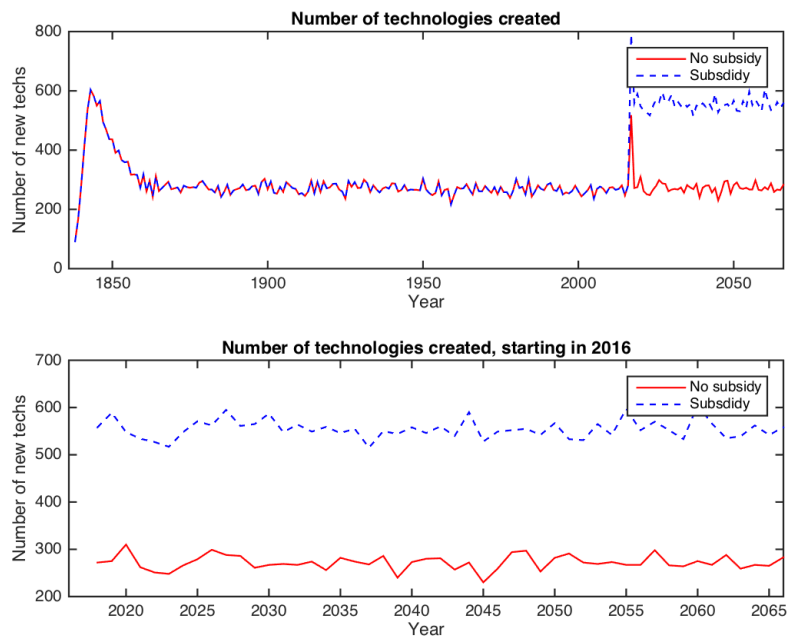


Figure 6: Number of technologies created every year (Ignore the spike around 2020).

## 25% subsidy on new combinations for 50 years

	No Subsidy	Subsidy	% Change
<b>Welfare</b>	-0.00010501	-0.00010509	-0.0008151
<b># technologies</b>	66070	66169	0.0014984
<b>Average GDP growth</b>	0.021351	0.021312	-0.0018348

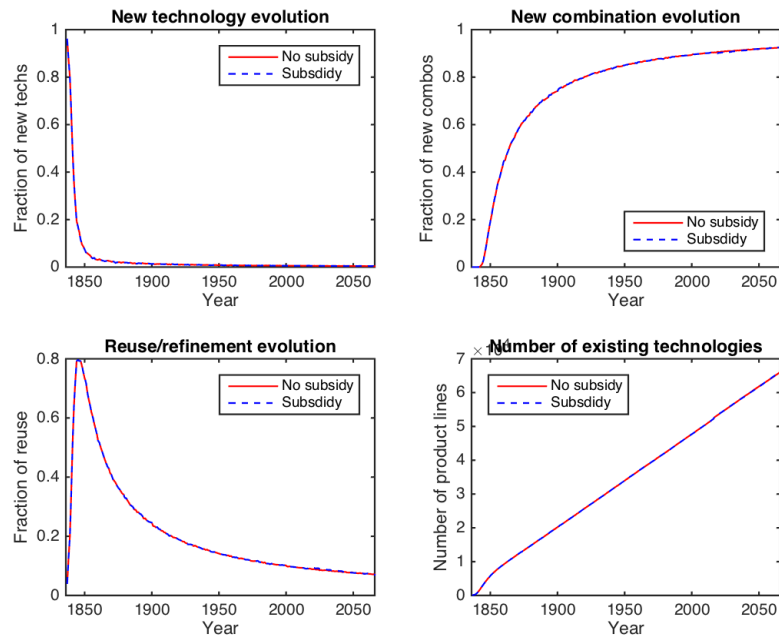


Figure 7: Evolution of patent shares across the whole period

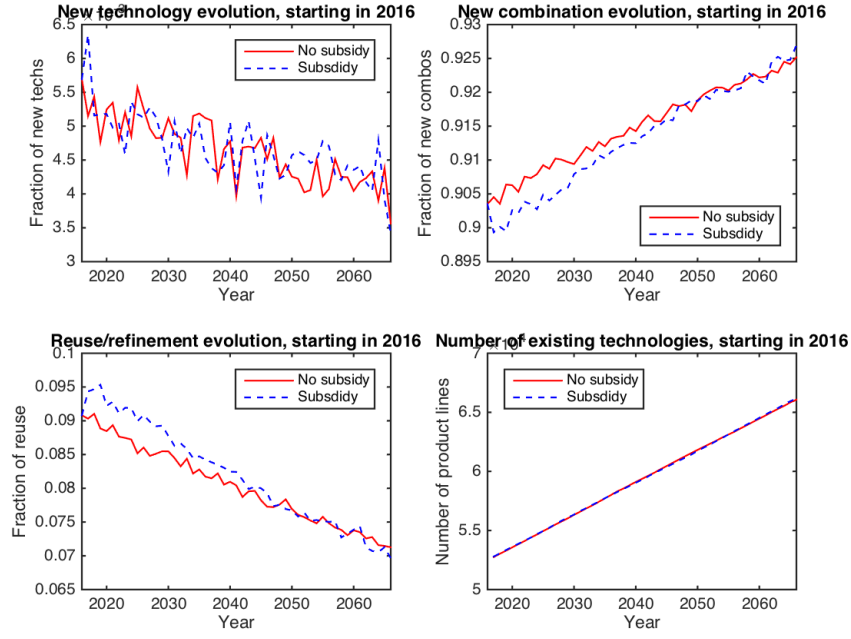


Figure 8: Evolution of patent shares, starting in 2016

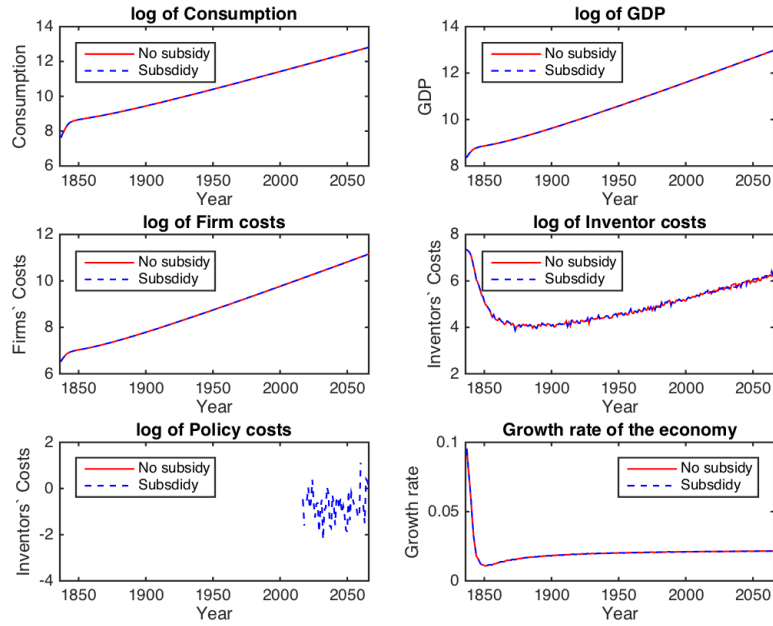


Figure 9: Evolution of aggregate variables over the whole period

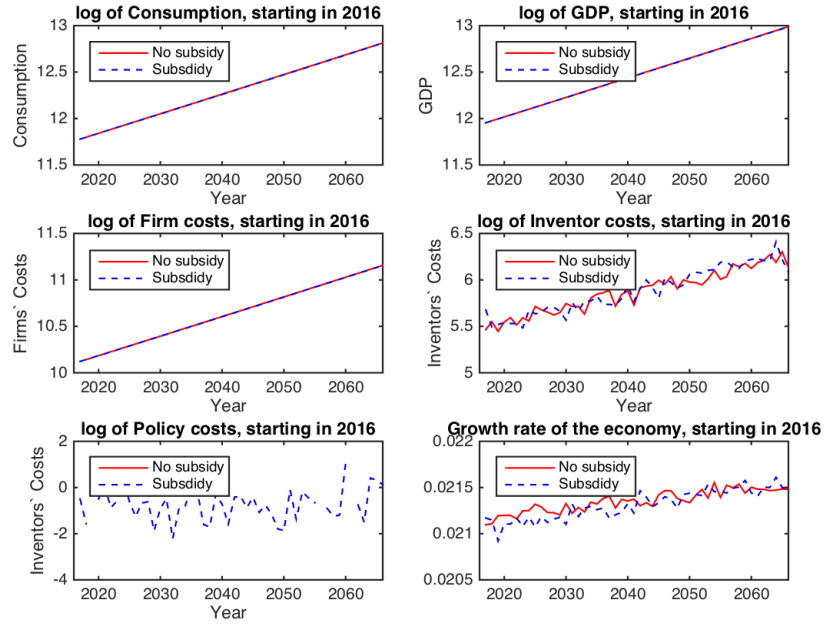


Figure 10: Evolution of aggregate variables starting in 2016

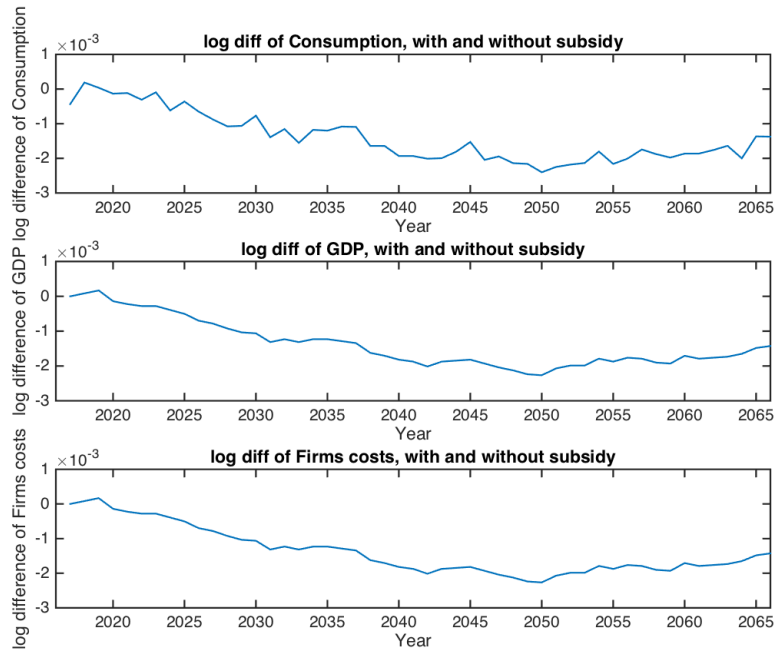


Figure 11: Log difference of variables, with subsidy - without subsidy, starting in 2016.

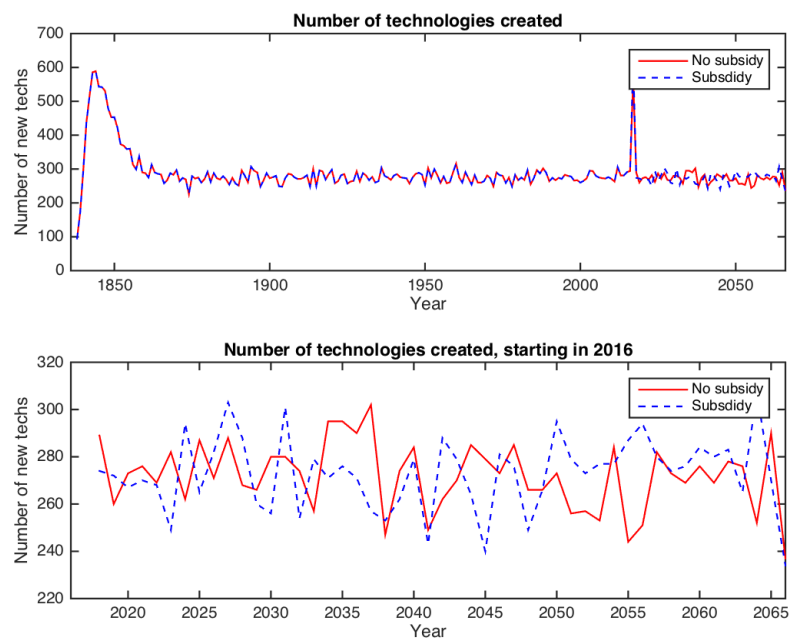


Figure 12: Number of technologies created every year (Ignore the spike around 2020).