ONLINE SUPPLEMENT

Supplement Section A. Formal test

A formal test of the visualization involves a fixed effects regression of pooled economic growth data. GDP per capita logged[1] is the dependent variable with two independent variables: (1) time and (2) years the carbon price policy is implemented (coded as 0 for years without the policy and 1 for years with the policy). While not included in the figure for visual uniformity, Australia's implementation of a carbon price was included in this analysis for the three years the country had a carbon price.

Table 1 displays fixed effects regression of economic growth on panel data from 1979 to 2018. The presence of a carbon price is not significant and has no effect on economic growth, while the passage of time remains strong and significant. This formal test confirms the data visualization.

Table 1. Fixed Effects Regression of Economic Growth

Variables	Model
Time	0.017***
	(0.0003)
Carbon Price Presence	- 0.016
	(0.012)
R^2	0.50
N	800

Note: Numbers in parentheses are standard errors.
*$p < 0.05$, **$p < 0.01$, ***$p < 0.001$
Data source: OECD

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[1] The difference in logs between one year and the next is virtually identical to percentage change from one year to the next.

Supplement Section B. Carbon Price Implementation of countries in paper

Country	Years Active	Country	Years Active
Australia (AUS)	2012-2014	**Japan (JPN)**	2012-present
Austria (AUT)	None	**Netherlands (NLD)**	None
Belgium (BEL)	None	**New Zealand (NZL)**	2008-present
Canada (CAN)	2019-present	**Norway (NOR)**	1991-present
Denmark (DNK)	1992-present	**Portugal (PRT)**	2015-present
Finland (FIN)	1990-present	**Spain (ESP)**	2014-present
France (FRA)	2014-present	**Sweden (SWE)**	1991-present
Germany (DEU)	None	**Switzerland (CHE)**	2008-present
Ireland (IRL)	2010-present	**United Kingdom (GBR)**	2013-present
Italy (ITA)	None	**United States (USA)**	None

Source: World Bank Carbon Pricing Dashboard, 2019

Supplement Section C. Figure construction
To construct the figures, I downloaded GDP per capita data from the OECD and also referenced
the World Bank's "Carbon Pricing Dashboard" to identify years of carbon price adoption (cited
below). I used R software and the 'ggplot2' graphics package to construct the figures. The
command, `geom_line`, allowed me to graph a line for each country over time and the
command, `geom_point`, allowed me to plot the year of carbon price adoption on each growth
line.

NORDIC COUNTRIES
```
ggplot(gdppc, aes(Year)) + labs(colour = "Country") + geom_line(aes(y = DNK,
colour="DNK")) + geom_line(aes(y = FIN, colour="FIN")) + geom_line(aes(y =
SWE, colour="SWE")) + geom_line(aes(y = NOR, colour="NOR")) +
geom_point(aes(1992, 33935.59936, colour="DNK"))+ geom_point(aes(1990,
28100.03672, colour="FIN")) + geom_point(aes(1991, 29455.19939,
colour="SWE")) + geom_point(aes(1991, 40832.99758, colour="NOR"))+ labs(title
= "Nordic Countries") + theme_bw()+ scale_y_continuous("GDP per capita",
breaks = c(20000, 40000, 60000), limits = c(10000, 70000), labels =
c("$20000", "$40000", "$60000"))
```

LIBERAL COUNTRIES
```
ggplot(gdppc, aes(Year)) + labs(colour = "Country") + geom_line(aes(y = USA,
colour="USA")) + geom_line(aes(y = GBR, colour="GBR")) + geom_line(aes(y =
CAN, colour="CAN")) + geom_line(aes(y = AUS, colour="AUS")) + geom_line(aes(y
= IRL, colour="IRL")) + geom_line(aes(y = NZL, colour="NZL"))+
geom_point(aes(2010, 43298.66068, colour="IRL")) + geom_point(aes(2013,
37102.70953, colour="GBR")) + geom_point(aes(2008, 30937.47485,
colour="NZL")) + labs(title = "Liberal Countries") +  theme_bw() +
scale_y_continuous("GDP per capita", breaks = c(20000, 40000, 60000), limits
= c(10000, 70000), labels = c("$20000", "$40000", "$60000"))
```

CONTINENTAL COUNTRIES AND JAPAN
```
ggplot(gdppc, aes(Year)) + labs(colour = "Country") + geom_line(aes(y = AUT,
colour="AUT")) + geom_line(aes(y = BEL, colour="BEL")) + geom_line(aes(y =
FRA, colour="FRA")) + geom_line(aes(y = DEU, colour="DEU")) + geom_line(aes(y
= JPN, colour="JPN")) + geom_line(aes(y = NLD, colour="NLD")) +
geom_line(aes(y = CHE, colour="CHE"))+ geom_point(aes(2014, 36644.29451,
colour="FRA")) + geom_point(aes(2012, 35613.13851, colour="JPN")) +
geom_point(aes(2008, 53684.94736, colour="CHE")) + labs(title = "Continental
Countries and Japan") + theme_bw() + scale_y_continuous("GDP per capita",
breaks = c(20000, 40000, 60000), limits = c(10000, 70000), labels =
c("$20000", "$40000", "$60000"))
```

MEDITERRANEAN COUNTRIES
```
ggplot(gdppc, aes(Year)) + labs(colour = "Country") + geom_line(aes(y = ESP,
colour="ESP")) + geom_line(aes(y = PRT, colour="PRT")) + geom_line(aes(y =
ITA, colour="ITA")) + geom_point(aes(2014, 30651.96849, colour="ESP")) +
geom_point(aes(2015, 26675.88564, colour="PRT"))+ labs(title = "Mediterranean
Countries") + theme_bw() + scale_y_continuous("GDP per capita", breaks =
c(20000, 40000, 60000), limits = c(10000, 70000), labels = c("$20000",
"$40000", "$60000"))
```

Supplement Section D. Data Sources

OECD. 2019. "Level of GDP per capita and productivity." *GDP per head of population in USD, constant prices, 2010 PPPs.* Accessed at: https://stats.oecd.org/Index.aspx?DataSetCode=PDB_LV

World Bank. 2019. "Carbon Pricing Dashboard." Accessed at: https://carbonpricingdashboard.worldbank.org/