Regulatory Complexity & Policy Uncertainty: Economic Headwinds On the U.S. Mainland

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Three Principles for Policy Makers*

1. Keep the regulatory system clear, simple, and easy to administer, and then live with it.
2. Keep the tax system as simple as possible.
3. Make economic policies predictable.

I. The Expanding Regulatory State

Some Evidence

1. Scale and growth of federal regulations
2. Scale of the federal tax code
3. State & local government regulations
   - Example: Expansion in occupational licensing
4. A Remark on Puerto Rico
CFR page counts do not include executive memoranda, regulatory guidance, and other regulatory “dark matter.”

In recent years, the CFR contains more than 1 million “commandments”: instances of “must”, “shall”, “may not”, “required” and “prohibited”. Commandments grow roughly in proportion to page counts.

Reproduced from Davis (2017), who draws on Dawson and Seater (2013) and Crews (2016)
Regulatory “Dark Matter”

*CFR* page counts **understate** the scale and growth of the regulatory state, because many important pronouncements by the regulators involve “guidance” rather than formal regulations.

As the D.C. Circuit Court observed in *Appalachian Power Co. v. EPA* (208 F.3d 1019 (D.C. Cir. 2000)):
“The phenomenon we see in this case is familiar. Congress passes a broadly worded statute. The agency follows with regulations containing broad language, open-ended phrases, ambiguous standards and the like. Then as years pass, the agency issues circulars or guidance or memoranda, explaining, interpreting, defining and often expanding the commands in regulations.... **Several words in a regulation may spawn hundreds of pages of text** as the agency offers more and more detail regarding what its regulations demand of regulated entities. *Law is made, without notice and comment, without public participation, and without publication in the Federal Register or the Code of Federal Regulations.*”

The U.S. Federal Tax Code

• The scale and complexity of the U.S. tax code also grew dramatically in recent decades. As of 2011, it takes four million words or 70,000 pages (another 52 bibles!) to explain the federal tax code (McCaherty, 2014).

• There were about 4,400 changes to the tax code from 2000 to 2010, 579 changes in 2010 alone.
The U.S. Federal Tax Code

• One reason the federal tax code is so large and complex is because policy makers (and citizens) insist on using it to bestow financial favors on certain activities and groups.

• “Tax expenditures” – tax revenues foregone because of rules that grant tax breaks under particular conditions and for certain taxpayers – in FY 2015 were about $1.4 trillion. By way of comparison, all direct federal spending was about $3.5 trillion in 2014.
Only 5% in mid 1950s; 10% by 1965, 25% by 2008.

Examples: Barber, manicurist, florist, funeral attendant, tree trimmer, music therapist, massage therapist, sign language interpreter, taxidermist, auctioneer, travel agent, travel guide, animal trainer, taxi driver, interior designer, and hundreds of others. See Carpenter et al. (2012).

A Remark on Puerto Rico

• Historically, the Puerto Rican tax code and regulatory system abound with provisions for special business interests: Targeted tax breaks, barriers to business entry and expansion, licensing requirements, and burdensome regulations that favor incumbents over potential rivals.

• In this climate, profitability and survival often rest on special tax breaks and regulatory advantages. The result is a complicated web of policy-induced financial incentives that helps sustain a rent-seeking business culture and an overly intrusive role for the government.

• See my paper with Luis Rivera-Batiz on “The Climate for Business Development and Employment Growth in Puerto Rico” for an extended discussion. The table on the next page summarizes an illustrative set of Puerto Rican business tax incentives enacted into law in a single year.
<table>
<thead>
<tr>
<th>Law</th>
<th>Description</th>
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<tbody>
<tr>
<td>Law 109</td>
<td>Grants a 50 percent tax credit, under certain conditions, for the acquisition of a business in the process of closing operations in Puerto Rico.</td>
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<td>Law 110</td>
<td>Raises the tax credit on the purchase of products manufactured in Puerto Rico by certain enterprises from 10 to 25 percent.</td>
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<tr>
<td>Law 112</td>
<td>Grants certain businesses the option of recognizing a deduction for spending on the purchase or construction of buildings, structures, and equipment and machinery.</td>
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<td>Law 113</td>
<td>Grants double deductions for spending on employee training and on research and development.</td>
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<td>Law 115</td>
<td>Liberalizes administrative restrictions on credit cooperatives to allow them to act as agents in selling mortgage loans and in launching new products.</td>
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<td>Law 117</td>
<td>Creates the Credit and Guarantees Fund for Agricultural Loans (Fondo de Credito y Guantias de Prestamos Agricolas). If a farmer cannot meet a loan obligation to a private bank, the farmer can request a grant from the Fund to cover the debt. The Fund is authorized to grant up to $100 million during a four-year period.</td>
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<tr>
<td>Law 121</td>
<td>Creates the Corporation for Development of Arts, Sciences, and Film Industry of Puerto Rico. The Corporation offers incentives and administers the funds financing productions.</td>
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<td>Law 141</td>
<td>Exempts associations of legal owners of vacation clubs from income taxes, promoting the time-share industry.</td>
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<td>Law</td>
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<td>Law 143</td>
<td>Exempts fees earned by financial institutions for issuing guarantees or letters of credit to finance tourism development projects from income taxes.</td>
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<td>Law 145</td>
<td>Provides tax incentives to innovative technology industries that establish operations in PR and that generate high skill scientific, technological, and managerial employment.</td>
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<tr>
<td>Law 169</td>
<td>Amends the 1994 Internal Revenue Code to grant eligible businesses a tax credit equal to 10% of the purchase value for products manufactured in Puerto Rico.</td>
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<tr>
<td>Law 174</td>
<td>Grants excise tax exemptions to enterprises for the purchase of machinery and equipment to fulfill environmental, security, and health requirements. This law also grants income tax credits on machinery and equipment acquired for businesses devoted to call centers established in Puerto Rico.</td>
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<tr>
<td>Law 163</td>
<td>Permits the Industrial Development Company (Compania de Fomento Industrial) to rent space at low cost to nonprofit organizations for the establishment of factories that employ handicapped workers.</td>
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<tr>
<td>Law 225</td>
<td>Reduces the income tax rate on call center operations to 4 percent or 2 percent, depending on geographic service area. It also grants full exemption from real estate taxes, municipal patents, and other municipal taxes during the first five years after the law takes effect.</td>
</tr>
<tr>
<td>Law 226</td>
<td>Grants full exemption from income taxes and partial exemption on municipal patents and other municipal taxes to certain businesses located in Vieques, Culebra, or any other municipality with similar economic or unemployment situations.</td>
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Reproduced from Table 6-13 in Davis and Rivera-Batiz (2006).
II. Breeding Complexity and Uncertainty

The sheer volume and complexity of statutes, regulations, regulatory guidance, and tax code provisions – and their instability over time – are barriers to:

• Knowledge and comprehension of the law
• Avoidance of legal jeopardy
• Sound planning by individuals, businesses and organizations

Thus, the enormous expansion of the regulatory state breeds complexity and uncertainty in economic affairs.
Huge Scale Leads to More Discretion – Adding To Uncertainty and Raising Potential for Abuse

As the regulatory state expanded, regulators acquired great power to interpret statutes, transform broad and vague legislative mandates into specific regulations, and exercise discretion in crafting and enforcing regulations.

As the system grew more complex, interpretation and enforcement became more uncertain. The scope for capricious regulator conduct grew (Epstein, 2011a,b), as did the risk that regulators exercise their discretion as a tool of political control (Cochrane, 2015).
Breeding Complexity and Uncertainty

Some Evidence

1. 10Ks: Regulation is a growing source of business risks
2. Newspaper-based measures of policy uncertainty
   – Healthcare Policy Uncertainty Index
   – Financial Regulation Uncertainty Index
Regulation as a Source of Business Risks: Using 10-K Filings to Quantify Its Importance

• Since 2006 (for FY 2005) the SEC has required most publicly held firms to include a separate discussion of “Risk Factors” in Part 1a of their annual 10-K filings.

• In explaining “How to Read a 10-K” at www.sec.gov/answers/reada10k.htm, the SEC describes Part 1a as follows:
  – Item 1A - “Risk Factors” includes information about the most significant risks that apply to the company or to its securities. Companies generally list the risk factors in order of their importance. In practice, this section focuses on the risks themselves, not how the company addresses those risks. Some risks may be true for the entire economy, some may apply only to the company’s industry sector or geographic region, and some may be unique to the company.

• Quantification: (a) Calculate the share of sentences in Part 1a of each 10-K filing that contains one or more regulation-related terms. (b) Compute the cross-firm average of this share by filing year. Plot the resulting time series.
Regulation and Other Government Policy Matters Account for a Growing Share of Business Risks, According to 10-K Filings


Note: In addition to regulatory matters, “All Government Policy Risks” includes those related to fiscal policy, monetary policy, entitlement and welfare programs, trade policy and more.
Category-Specific Policy Uncertainty Indices

Constructing the category-specific indices shown below

- Get monthly counts of articles in Access World News (covering hundreds of daily US papers) that contain at least one term from each of the following sets:
  - \( E \): \{economic or economy\}
  - \( P \): \{regulation or deficit or “federal reserve” or congress or legislation or “white house”\}
  - \( U \): \{uncertain or uncertainty\}
  - \( C \): \{category-specific terms\}

  Include “the Fed”, “regulatory” and other variants.

- Scale the raw EPUC count by the count of all articles in the same month.

- Multiplicatively normalize the time series of scaled monthly counts to a mean of 100 from 1985 to 2009.

- See Baker, Bloom and Davis (2016) for more information.
Healthcare Policy Uncertainty Index, 1985 Q1 to 2016 Q4, Quarterly

Affordable Care Act: Legislative and electoral battles, uncertainty about effects, constitutional challenges, implementation snafus

Clinton healthcare reform initiative

Bush announces Medicare reform initiative, leading to Medicare Act of 2003

Trump-Clinton Election

Notes: The index reflects the frequency of newspaper articles about economic policy uncertainty and healthcare policy matters, as indicated by terms like "healthcare," "hospital," "health insurance," and "Medicare." Data are from Baker, Bloom, and Davis (2016) and are available and updated at www.PolicyUncertainty.com. Normalized to a mean of 100 from 1985 to 2009.
Financial Regulation Uncertainty Index, 1985 Q1 to 2016 Q4, Quarterly

IV. Brief Remarks on Economic Effects

1. Disproportionate Effects on Smaller and Younger Businesses
2. Occupational Licensing and Geographic Mobility
3. Firm-Level Effects of Regulatory and Policy Uncertainty
4. Macroeconomic Effects of Regulatory and Policy Uncertainty
5. Regulatory Uncertainty Undermines Regulatory Goals
Disproportionate Regulatory Burdens
On Smaller and Newer Businesses?
Yes, despite some small-firm exemptions. Why? Three basic reasons:

1. Scale economies in compliance $\rightarrow$ higher compliance costs per unit of output (or per worker) at smaller firms
2. One-time costs of learning relevant regulations, establishing relationships with regulators, and developing compliance systems $\rightarrow$ favoring incumbents over entrants
3. Larger, established firms have greater capacity & incentive to lobby for legislative exemptions, administrative waivers, and favorable regulatory treatment.

Points 1 & 2 also imply that regulatory and tax complexity deter large, mature firms from expanding into new markets, products, etc. Thus, tax and regulatory complexity also soften competitive pressures and repress creative destruction more broadly.
Employment in firms less than five years old fell from about 18% of private sector employment in 1981 and 1987-1988 to 9% in 2013.

“Young” means < 60 months since the firm’s first paid employee as of March in the indicated calendar year.
Occupational Licensing Restrains Geographic Mobility

Figure 1: Difference in Migration Rates of Workers in Most vs. Least Licensed Occupations

Source: Census Bureau, American Community Survey 2010-2013; CEA Calculations. Number is calculated from an OLS regression controlling for race, citizenship, sex, citizenship, number of children, marital status, education, income, year, and state. Ages 25 to 65 were included.
Firm-Level Effects of Policy Uncertainty

• My research with Scott Baker and Nick Bloom finds:
  – High policy uncertainty raises the stock-price volatility of firms in sectors with heavy reliance on government spending (e.g., healthcare, defense industries, infrastructure construction) and high exposure to regulation (e.g., healthcare, financial services).
  – Rising policy uncertainty lowers firm-level investment and employment growth in sectors with heavy reliance on government spending and high exposure to regulation. See Ion and Gulen (2016) for additional evidence on investment responses.

• These effects on firm-level stock-price volatility, investment rates, and employment growth rates are sizable in sectors with high exposure to regulatory and other policy risks.
Macroeconomic Effects of Policy Uncertainty

• My work with Baker and Bloom and my work with Arbatli et al. find that upward shocks to policy uncertainty foreshadow deteriorations in aggregate investment, employment and output measures. The responses are material, but moderate, in size.

• Many other recent studies find similar results.

• Two possible interpretations (not the only two):
  – Higher policy uncertainty causes the negative effects
  – Policy uncertainty shocks coincide with other negative developments that are not (fully) captured by the other variables in the statistical model, and the other developments cause the deterioration.
Regulatory Uncertainty Undermines Regulatory Goals

Firms can make investments in production capacity and product quality, where “quality” includes things like pollutants and health risks per unit of output and consumption.

Raising quality typically requires costly investments. For example, reducing pollutants at a coal-fired power plant or improving the safety of the working environment requires up-front outlays.

Let $x$ denote the regulatory penalty per unit of pollutant or health risk caused by producing and consuming the good. When quality investments are costly to reverse, as they typically are, uncertainty about future regulatory policy (future value of $x$) depresses the firm’s investments in capacity and quality.
V. What to Do?

1. Design for simplicity
   – Pigouvian taxes to limit pollution instead of command-and-control regulations.
   – High tangible capital requirements for commercial banks instead of detailed regulation of their activities and balance sheet structures.

2. Design to foster predictable policymaker responses
   – Reform bankruptcy code so illiquid and insolvent financial institutions can remain operational, curtailing negative spillovers to financial system. This would foster more predictable policy responses to financial institution failures and lessen the need for regulator discretion and hard calls in crisis situations. See Scott and Taylor (2012) and Scott, Jackson and Taylor (2015).

3. Reassert Congressional oversight
   – Sensible idea but insufficient given scale, scope and complexity of regulatory state.
4. Restrain the regulators

- Common-sense idea: Before introducing a new regulation, a regulatory agency should clearly describe the problem it seeks to address, assess its significance, explain why regulation is a good response, provide a sound cost-benefit analysis for any proposed regulatory action, and explain why the proposed action is better than alternatives – including the alternative of no regulatory action.

- Every U.S. president since Jimmy Carter has tried some version of this idea.

- It hasn’t worked.
4. Restrain the regulators

- Why do regulatory impact analyses often fail to deliver:
  - For technical reasons, when costs & benefits are hard to quantify.
  - More important, there’s a serious two-part institutional problem:
    1) It’s too easy for regulators to circumvent requirements for an impartial, rigorous analysis of benefits and costs. The regulatory agency orchestrates the impact analysis and judges its adequacy.
    2) When agencies promulgate ineffective, costly or downright perverse regulations, recourse is difficult. Congress is too distracted for effective oversight, administrative courts are creatures of regulatory agencies, and the process in the general courts is slow and costly. Also, courts tend to defer to regulators.
Restraining the Regulators

**A Proposal:** Establish independent regulator oversight commissions (IROCs), with powers as follows:

- At its own initiative or at the request of affected parties, an IROC could review the adequacy and quality of regulatory impact analyses offered by the regulator in support of a regulation.
- If the IROC determined that the impact analysis was inadequate or incomplete, or did not support the case for the regulation under review, the regulation would be suspended.
- IROCs would have no power to make or modify regulations. Unlike courts, they could not rule on legal questions – e.g., the scope of an agency’s regulatory powers.
- IROC authority would be limited to suspending regulations that are not adequately supported by high-quality, even-handed regulatory impact analyses.
4. End politically manufactured injections of uncertainty
   – No more nail-biting debt-ceiling fights, fiscal cliffs, partial government shutdowns, gross execution failures, etc.

5. Recognize the limits of regulation
   – Government regulation is not the right solution to every societal problem.
V. Concluding Remarks

• Many of my fellow economists speak of headwinds that curtail the possibilities for growth.
• Yes, we face headwinds. But my remarks today suggest that many of the headwinds are of our own making.
• Some degree of regulatory complexity and policy uncertainty will be with us always. But their extent, and the weight of their burdens, depends greatly on policy design and our approach to regulation, taxation and policy making.
• We’ve been marching away from the three principles I borrowed from George Shultz. A course correction is overdue.
Extra Slides
Restraining the Regulators

Some Practical Questions:

1. Number, term and appointment process for IROC members?
2. Compensation of commissioners, IROC staff and budget?
3. IROC scope? One IROC per regulatory agency?
4. Special provisions (Short of legislation) to allow the President or Congress to overturn IROC decisions?

Are IROCs a good idea, on balance? I don’t know.

Prudence suggests starting small by creating a single IROC for an agency greatly in need of restraint. For the EPA?
References


References


Global Economic Policy Uncertainty Index, January 1997 to January 2017

Notes: Global EPU calculated as the GDP-weighted average of monthly EPU index values for US, Canada, Brazil, Chile, UK, Germany, Italy, Spain, France, Netherlands, Russia, India, China, South Korea, Japan, Ireland, Sweden, and Australia, using GDP data from the IMF's World Economic Outlook Database. National EPU index values are from www.PolicyUncertainty.com and Baker, Bloom and Davis (2016). Each national EPU Index is renormalized to a mean of 100 from 1997 to 2015 before calculating the Global EPU Index.