Special Topics in Risk Management

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Complexity and Risk

1. Problems increasingly spill over organizational boundaries

   The need for diverse pieces of information, from a variety of sources, can make it difficult to detect major risks in time

   -- e.g. 9/11 and the need to "connect the dots"

2. Complexity means that risks can spill over from one organization to another

   -- e.g., Cyberattacks go through the "weakest link" including business partners

Risk, Uncertainty, and Judgment

Frank Knight: Risk vs. Uncertainty

- We can quantify risk
- We need judgment to address uncertainty
  - Both of these are important (e.g., risk of variation in processing times or volume)
  - Government routinely faces uncertainty (e.g., what will Congress do? When?)

Risk Velocity

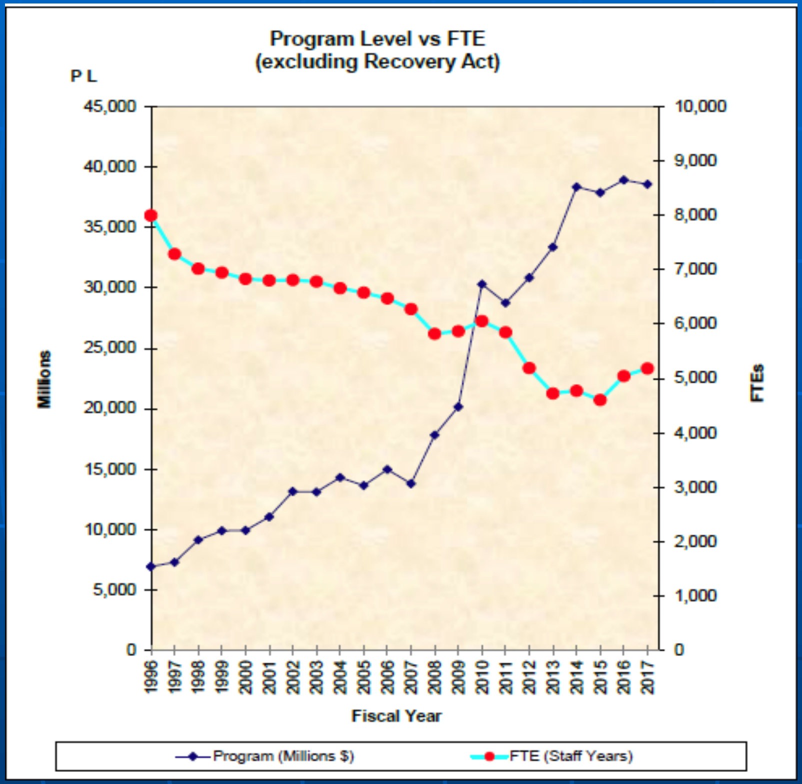
- A newly understood issue: risk velocity
- Some risks materialize quickly (Census and OPM breach)
- Others more slowly (disinvestment in infrastructure, e.g., Metro)
- Some have unknown velocity, e.g. when Congress might expand an agency’s mission or reduce its budget

Big Risks are Often Strategic

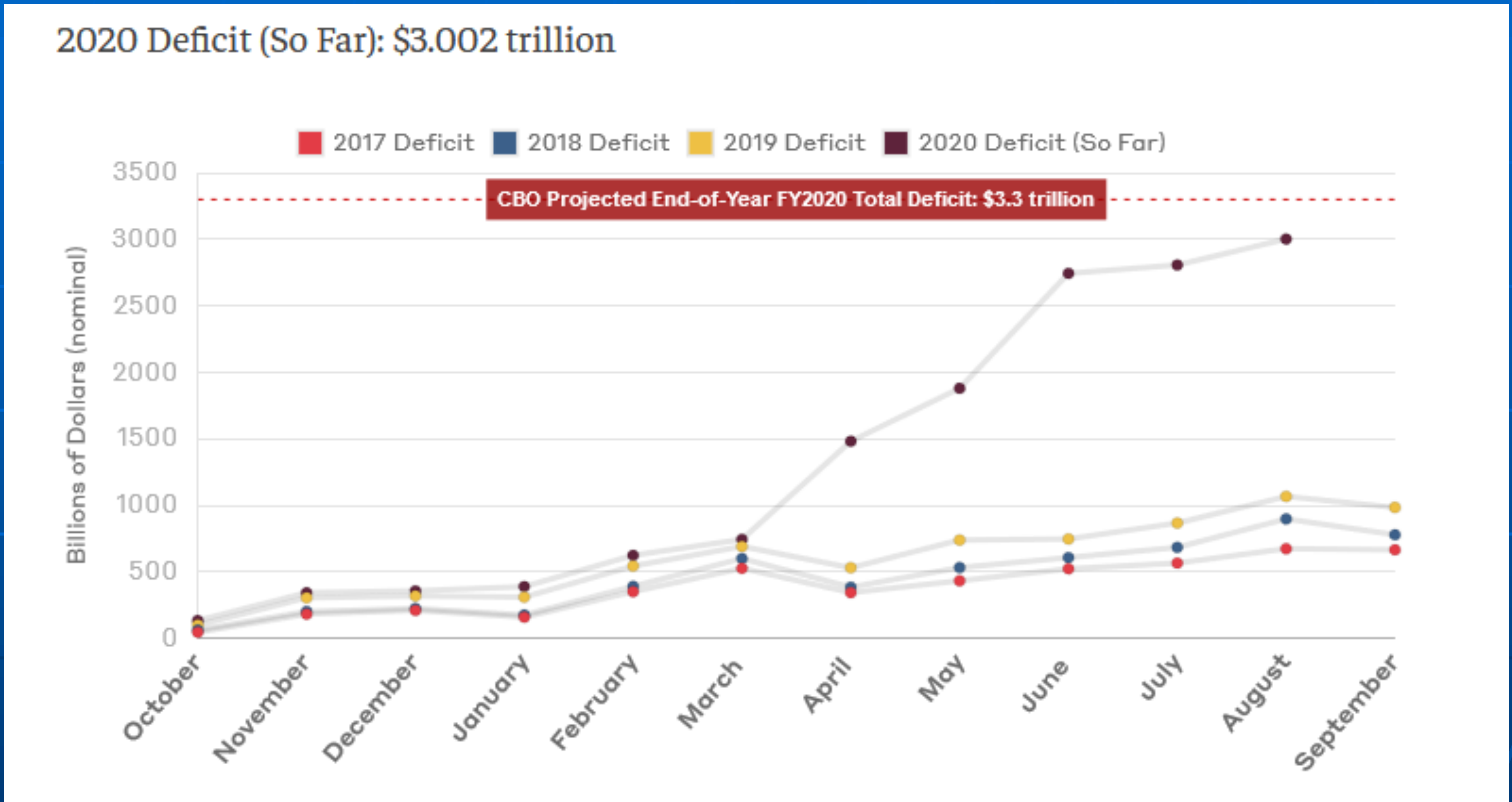
- Strategic risks – understanding when to start, modify, or drop a strategy – are the largest risks affecting major companies, compared to operational events, incidents or compliance failures

- In today's media-intensive environment, reputational risk often has strategic implications (CDC, FDA, IRS, Equifax, VW, Boeing)

What do Strategic Risks Look Like?



What Does That Risk Look Like Today?



Resilience

Risks can come from many places.

Resilience is the capacity of an organization to deal with risks when we don’t know where they will come from. Building resilience requires thought beforehand to strengthen the organization.

For example:

- A cyber event (OPM)
- An insider threat (Snowden)
- Unexpected retirements
- Unexpected budget constraints

Why Resilience is Important

- "Go back to 1975, when I had my first job out of high school. Since then we've had multiple wars, multiple terrorist attacks, multiple countries going bankrupt—three times for Argentina—and multiple recessions. We've had interest rates as high as 21 percent and as low as 1 per-cent. These things happen. So when you're running a business, you have to run the business maturely, knowing that things are going to happen. The only thing that is unpredictable is the timing and, sometimes, where the punch is coming from. But you know it's coming, and nobody, in my opinion, has ever really picked the inflection points."

-- Jamie Dimon, 2006

What Resilience Looks Like

"..we have run an extremely adverse scenario that assumes an even deeper contraction of gross domestic product, down as much as 35% in the second quarter and lasting through the end of the year, and with U.S. unemployment continuing to increase, peaking at 14% in the fourth quarter. Even under this scenario, the company would still end the year with strong liquidity and a CET1 ratio of approximately 9.5% (common equity Tier 1 capital would still total $170 billion). This scenario is quite severe and, we hope, unlikely."

-- Jamie Dimon, April 2020

Mission Risk

Mission Risk: Risk that political leaders significantly change the agency’s mission so that past performance may not ensure that same level of performance in carrying out the new mission.

Group Exercise

A key objective for an agency:

> "Ensure that, at all times, the agency possesses the knowledge base needed to carry out essential functions"

How might Mission Risk prevent achievement of this objective? Is there any form of resilience that can help to mitigate Mission Risk?

Is ERM a Sign of a New Way to Manage?

Note what ERM does:

1. Addresses the problem of silos
   - As barriers to information flow
   - As barriers to cooperation
2. Addresses the growing problem of complexity
3. Improves ability of leaders and managers (1) to make risk-reward tradeoffs, and (2) to know what's going on and make better decisions
4. Establishes the risk office as a continually growing source of knowledge about the agency and risk-reward lessons it has learned
5. At a time of resource constraints, helps management to "pick important problems and fix them"