THE PROSPERITY PROBLEM

FALLING PRODUCTIVITY

Lee Swindall
Vice-President, Sector Strategy Development
POSITIVE CORRELATION: PRODUCTIVITY TO GROWTH

Nearly 1:1 Correspondence between GDP Growth and Productivity Growth
PRODUCTIVITY SLIDE: RECENT EVIDENCE

- Productivity declined at 3.0 percent annual rate, biggest drop since the Q1 of 2014
- Productivity grew 0.6 percent in 2015, the smallest increase since 2013
- Productivity increased at annual rate <1.0% percent in each of the last five years
- Average annual productivity growth rate 2007-2015 is 1.2 percent, well below the long-term rate of 2.1 percent from 1947 to 2015

- U.S. nonfarm productivity fell in Q4 2016 at fastest pace in more than a year, causing jump in labor-related production costs.
PRODUCTIVITY PERSPECTIVE

Putting productivity growth in perspective

1966: President Eisenhower signs legislation authorizing the funding and construction of the interstate highway system.

1973: The first oil price shock ushered in an era of inflation and lower growth and productivity.

1987: Economist Robert Solow quips that "computers are everywhere but in the productivity statistics."

1991: The worldwide web becomes accessible to the general public.

1992: GPS becomes fully operational.

1999: Apple popularizes WiFi by incorporating a WiFi slot into its laptops.

2001: Tech stock bubble bursts.

2003: Skype launches.

2004: Over half of US households own a computer, up from 8% in 1984.

2008: Global Financial Crisis.

2013: 51% of US adults bank online.

2014: 90% of US adults have a cell phone, 64% have a smartphone.

Goldman Sachs economists expect 1.5% trend productivity growth over the next decade.

GDP: EXTENDED GROWTH DROUGHT

U.S. GOES RECORD 10 STRAIGHT YEARS WITHOUT 3% GROWTH IN GDP

Source: Bureau of Economic Analysis
Figure 1: U.S. Economic Growth from Different Productivity Rates

- Blue line: 1.46% Annual Growth
- Gray line: 2.91% Annual Growth

U.S. Gross Domestic Product ($ Trillions)
Manufacturing sector productivity has increased at an annual rate of less than 1.0 percent in each of the last 4 years.

The average annual rate of manufacturing productivity growth from 2007 to 2016 is 1.7 percent, which is below the long-term rate from 1987 to 2016 of 3.2 percent.

Unit labor costs increased 2.6 percent in 2016.

MANUFACTURING PRODUCTIVITY PLUNGE

Productivity change in the manufacturing sector, 1987-2015

- 1987-1990: 1.5
- 1990-2000: 4.1
- 2007-2015: 1.8

Source: U.S. Bureau of Labor Statistics
MANUFACTURING MFP: PERFORMANCE GAP WIDENS

THE FIRM LEVEL DATA SHOW INCREASED PRODUCTIVITY DISPERSION AND DECLINING DYNAMISM

Figure 10: Firm level productivity over time. Frontier firms and the rest, manufacturing and services

Robust productivity performance remains one of the fundamental components of a healthy economy.

*More than three-quarters of the productivity growth required to reignite the economy can be achieved by closing the gap between lagging companies and those on the productivity frontier.*

Source: “Can the US economy return to dynamic and inclusive growth?”, McKinsey Global Institute, November, 2016
SOLUTION IN REACH

1/4
Comes from technological, operational, or business innovations that go beyond today’s best practices and push the frontier

3/4
Potential productivity growth that comes from the broader adoption of existing best practices, or catch-up improvements

Source: Global growth: Can productivity save the day in an aging world?, McKinsey Global Institute, January, 2015
WISCONSIN’S ANSWER

Transformational Productivity Initiative
DIAGNOSTIC TRACK: TECHNOLOGY INTENSITY AND UTILIZATION

Process Lane: Technology Selection/Adoption/Integration Cycle

- Input Inefficiency 1 (IE1)
- Output Inefficiency 1 (OE1)
- Input Inefficiency 2 (IE2)
- Output Inefficiency 2 (OE2)
- Input Inefficiency 3 (IE3)
- Output Inefficiency 3 (OE3)

CASCADE
EFFECT

PRODUCTIVITY DRAIN
20 TO 40% LOSS
Thank You

Lee Swindall, VP
Wisconsin Economic Development Corporation