

Overview of the Research Program

Wayne Winegarden Niles Chura





Beyond the New Normal Establishing a Pro-Growth Economic Policy Environment

PART I:

Overview of the Research Program



Pacific Research Institute 101 Montgomery Street, Suite 1300 San Francisco, CA 94104 Tel: 415-989-0833

Fax: 415-989-2411 www.pacificresearch.org

Beyond the New Normal Establishing a Pro-Growth Economic Policy Environment Part 1 Overview of the Research Program

ISBN 978-1-934276-30-3

Download copies of this study at www.pacificresearch.org.

Nothing contained in this report is to be construed as necessarily reflecting the views of the Pacific Research Institute or as an attempt to thwart or aid the passage of any legislation.

©2017 Pacific Research Institute. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopy, recording, or otherwise, without prior written consent of the publisher.

Contents

Introduction	6
A review of the secular stagnation argument and their prescriptions	9
Structural slowdown, or policy slowdown?	15
Establishing a pro-growth policy mix	18
Endnotes	22
About the Authors	24
About Pacific Research Institute	25



"The symptoms of the crisis of the American spirit are all around us. For the first time in the history of our country a majority of our people believe that the next five years will be worse than the past five years."

-President Jimmy Carter

Crisis of Confidence

Speech, July 15, 1979

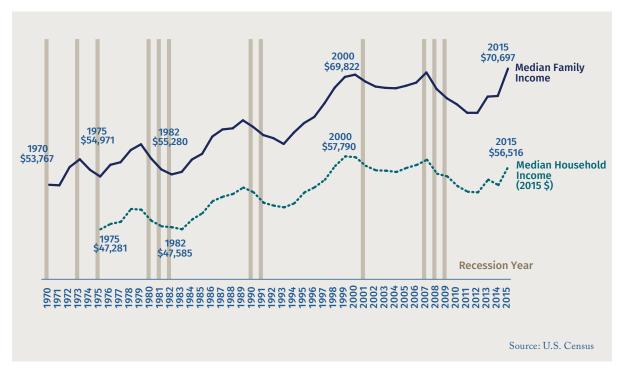
(the "Malaise Speech")

Introduction

Although President Carter was referring to the economic and energy crises of the 1970s, he could have been speaking about the economy of 2016.

As Figure 1 illustrates, average family income and average household income stagnated during much of the 1970s and has suffered a more protracted period of unacceptably slow income growth since 1999. Income stagnation has not been the norm for the U.S. economy, however. In contrast to the periods of weak economic growth, average household income grew very strongly during the 1980s and 1990s, and even faster during the 1950s and 1960s, see Table 1.

FIGURE 1. Median Family and Household Income Adjusted for Inflation 1970 - 2015



The National Bureau of Economic Research (NBER, the group that officially determines when a recession begins and ends) did not declare that the U.S. economy was consistently in a recession during the 1970s; nor has the NBER deemed that the U.S. economy has been in a constant recession since 1999. Figure 1, therefore, demonstrates that during periods of economic expansion, income growth patterns can vary tremendously.

Figure 2 illustrates the divergent economic growth trends. The green dotted line in Figure 2 presents the 4-year moving average of annualized quarterly growth in GDP. Like the stagnating real family incomes, Figure 2 illustrates that since the beginning of the 21st century the U.S. economy's average growth rate has declined.

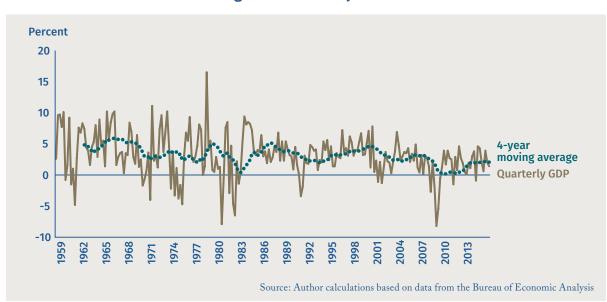


FIGURE 2. Annualized Percent Change in Inflation-adjusted GDP

TABLE 1. Average Annual Percentage Change in Family and Household Incomes, 1948 through 2015

	AVERAGE ANNUAL GROWTH RATE	
	MEDIAN FAMILY INCOME	MEDIAN HOUSEHOLD INCOME
1948-2015	1.4%	
1948-1970	3.1%	
1970-2015	0.6%	
1975-2015	0.6%	0.4%
1970-1982*	0.2%	0.1%
1982-1999	1.4%	1.2%
1999-2015	0.1%	-0.2%

^{*}Household income is as of 1975

Source: Author calculations based on U.S. Census data

TABLE 2. Average Annualized Quarterly Percentage Change in Real GDP

1958 Q2 through 2015 Q4

	AVERAGE ANNUALIZED QUARTERLY CHANGE IN REAL GDP
Whole period	3.14%
1958 Q2 – 1970 Q4	4.30%
1970 Q4 - 1982 Q4	2.69%
1982 Q4 – 2001 Q4	3.58%
2001 Q4 – 2015 Q4	1.89%

Source: Author calculations based on Bureau of Economic Analysis data

Table 2 provides further detail on these differing periods of economic growth. The table presents the average underlying rates of U.S. GDP growth since the second quarter of 1958 (the end of a recession that began in 1957 Q3, or what is referred to as the trough of the business cycle). Table 1 also provides the average underlying rates of U.S. GDP growth for key sub-periods that coincide with changes in the income and economic growth patterns illustrated in Figures 1 and 2, and ensure that each time period begins and ends with a trough of the business cycle (the beginning of an economic expansion).¹

Over this whole time period, the average annualized real GDP growth rate was 3.14 percent. It is notable that the rate of growth varied tremendously over this half century. From the beginning of the economic expansion that commenced in the second quarter of 1958 to the beginning of the economic expansion that began in 1970 Q4, real GDP grew 4.30 percent per year. Growth then stagnated during the 1970s – from the expansion that began in 1970 Q4 to the expansion that began 1982 Q4, real GDP grew at a significantly slower rate of 2.69 percent per year. From 1982 Q4 through 2001 Q4, the average growth rate accelerated again, rising at an annualized rate of 3.58 percent per year. However, since 2001 Q4 real GDP growth has only averaged 1.89 percent per year.

The conclusion from Figures 1 & 2 and Tables 1 & 2 is that some economic expansions will exhibit slow underlying growth (a weak growth path) that fails to raise household incomes broadly, while other economic expansions are blessed with robust underlying growth (a strong growth path) whose benefits are broadly shared. During the periods when the economy's growth rate decelerated (i.e. the 1970s and 2000/10s), other adverse trends followed, including slower average household income growth, greater income inequality, and increased poverty. The opposite trends occurred during periods when the economy's growth rate accelerated.

Clearly, the U.S. economy is currently mired in a weak growth path. Consequently, understanding why some economic expansions follow a weak growth path while others follow a strong growth path is of great importance. As would be expected, many explanations for the current weak economic growth path have been advanced.

The conclusion from Figures 1 & 2 and Tables 1 & 2 is that some economic expansions will exhibit slow underlying growth (a weak growth path) that fails to raise household incomes broadly, while other economic expansions are blessed with robust underlying growth (a strong growth path) whose benefits are broadly shared.

A review of the secular stagnation argument and their prescriptions

A nagging economic question is whether the current weak growth path is the *new normal* for the U.S. economy. Without trying to be comprehensive in our review, the answer to an alarming number of macroeconomists appears to be yes.

Charles Plosser, President of the Federal Reserve Bank of Philadelphia links the recent slow growth to long-lasting (or permanent) economic consequences from the Great Recession. Plosser

suggests that in the recent recession, the U.S. economy sustained what appears to be a permanent or at least highly persistent shock to the supply side of the economy that has lowered the level of GDP – although not necessarily its growth rate. One could contemplate numerous hypotheses about the nature of such a shock. In 2009, I put forward the idea that the crisis and recession were caused by a shock that likely had either permanent or very long-lasting consequences for the economy. I suggested that the financial crisis may have precipitated a permanent or highly persistent decline in the output of financial intermediation. I have also considered the possibility that the collapse in house values could be viewed as a permanent loss of wealth affecting household balance sheets. Either of these disturbances would require significant real adjustments in the economy.³

Former Fed Chairman Ben Bernanke also links the marked slowdown observed in Figure 2 to the financial crisis and headwinds the economy faced while attempting to rebound from the sharp financial crash. In a 2015 blog post, Bernanke cites a paper by Hamilton et al. to claim that the "recent slow growth is likely due less to secular stagnation than to temporary 'headwinds' that are already in the process of dissipating. During my time as Fed chairman I frequently cited the economic headwinds arising from the aftermath of the financial crisis on credit conditions; the slow recovery of housing; and restrictive fiscal policies at both the federal and the state and local levels (for example, see my August and November 2012 speeches.)"⁴

Kenneth Rogoff similarly attributes the slow economic growth since 2009 to the consequences from the financial crisis, or what he terms a debt super-cycle. According to Rogoff:

the evidence in favor of the debt super-cycle view is not merely qualitative, but quantitative. The lead up to and aftermath of the 2008 global financial crisis has unfolded like a garden variety post-WWII financial crisis, with very strong parallels to the baseline averages and medians that Carmen Reinhart and I document in our 2009 book, *This Time is Different* (Reinhart and Rogoff 2009). The evidence is not simply the deep fall in output and subsequent very sluggish U-shaped recovery in per capita income that commonly characterize recovery from deep systemic financial crises. It also includes the magnitude of the housing boom and bust, the huge leverage that accompanied the bubble, the behavior of equity prices before and after the Crisis, and certainly the fact that rises in unemployment were far more persistent than after an ordinary recession that is not accompanied by a systemic financial crisis. Even the dramatic rises in public debt that occurred after the Crisis are quite characteristic.⁵

Many other economists link the slower growth economy not to the Great Recession, but to embedded structural problems.

Furthermore, Lo and Rogoff (2015) argue that until the necessary deleveraging is completed, the adverse economic impacts from the debt super-cycle will continue to impede economic growth and, consequently, whether the economy is actually experiencing secular stagnation or not is still unknown.⁶

Many other economists link the slower growth economy not to the Great Recession, but to embedded structural problems. For instance, the Congressional Budget (CBO) in its January 2016 "Budget and Economic

Outlook" expects the economy to expand 2.0 percent a year between 2018 through 2026 – significantly less than the economy's long-run average around 3.0 percent. According to the CBO, the 2.0 percent growth rate "...represents a significant slowdown from the average growth of potential output that was observed during the 1980s, 1990s, and early 2000s; the slowdown results largely from slower projected growth in the nation's supply of labor."

Robert Gordon, economics professor at Northwestern University, also argues that structural economic changes now limit the U.S. economy's potential growth rate to below its historical long-run average – but links the slowdown to technology, not constraints to the growth of the labor supply. Specifically, Gordon argues that the economic growth slowdown is due to a deceleration in the growth of the economy's productivity (as well as other *aggregate supply* constraints) compared to past rates of growth, and that the productivity slowdown is structural in nature (e.g. that it will persist for many years into the future).

Gordon connects the long-term productivity growth the U.S. has been experiencing (from the late 1880s all the way to the 21st century) to industrial revolutions.

The first industrial revolution (IR #1) of steam engines created railroads, steamships, and the transition from wood to metal, with effects felt throughout the nineteenth century. The second industrial revolution (IR #2) combined the nearly simultaneous invention of a host of general purpose technologies, including electricity, the internal combustion engine, the telephone, wireless, chemical engineering, and the conquest of infectious diseases. ¹⁰

The first two industrial revolutions created the foundations for modern industrial life. The third industrial revolution (IR #3, beginning in the 1960s/1970s) is the information technology (digital revolution) that created the knowledge economy. The information technology revolution trans-

formed all segments of the economy from manufacturing to office work just as profoundly as the previous two industrial revolutions. Pessimistically, however, the major gains from the information technology revolution have been mostly exploited according to Gordon's thesis. The revolution is now exhibiting diminishing returns.

According to Gordon, when innovation from the first two industrial revolutions were out there was a new *revolution* to drive greater innovations in the stead of the waning revolution – innovations from IR #3 replaced the innovations from IR #2, which replaced the innovations from IR #1. However, as innovations from IR #3 are waning there is no subsequent revolution (an IR #4) to drive the next round of innovations. When coupled

The information technology revolution transformed all segments of the economy from manufacturing to office work just as profoundly as the previous two industrial revolutions.

with socio-economic factors such as declining education, declining hours worked per capita, and less entrepreneurship, the result is the slower growth potential of the U.S. economy. If Gordon's hypothesis is correct, then it naturally follows that there has been, and must continue to be, a marked slowdown in productivity growth (both output per hour and total factor productivity) that will be a significant growth constraint to the U.S. economy.

Preceding Gordon, Tyler Cowen (2011) also argued that innovations are experiencing a declining marginal value today as compared to their historical contributions.¹¹ Cowen comes to a similar conclusion that, due to this lower productivity growth, the ability of the U.S. economy to experience its historical growth rates are diminished.

Hall (2014) documents that as of 2013, total economic output was 13 percent below its 1990 through 2007 trend path. More important for this discussion, 3.5 percentage points of the shortfall was due to productivity, which Hall is "pessimistic about reversing". Similar to Gordon and Cowen, Hall argues that a persistent productivity growth slowdown portends slower U.S. economic growth due to technological (or aggregate supply) constraints.

Beyond the aggregate supply concerns, which theorists claim will persist even with growth enhancing policies, other stagnation theorists rely on the traditional Keynesian critique that capitalism is inherently unstable, and subject to bouts of chronic economic underperformance. These bouts of underperformance arise because at times, such as the present circumstances, aggregate demand can become insufficient and remain so for an extended period unless counteractive policies are employed.

According to Keynesian theory, insufficient aggregate demand occurs when private sector consumption and investment are too low. The low private sector expenditures are deemed "insufficient" relative to the economy's productive capacity causing large numbers of people (and machines) to become unemployed or underemployed, and total economic output to either grow slowly, or even contract. The problem compounds upon itself because the large number of under- and unemployed people decrease their consumption, which then aggravates the problem of insufficient aggregate demand, further worsening the economy's growth rate. A vicious cycle then develops, trapping the economy in a low-growth state.

Fears of sustained insufficient aggregate demand has led to the reemergence of Alvin Hansen's theory of secular stagnation.

Without stimulative policies from the government, this Keynesian analysis concludes that the long-term economic growth outlook for the U.S. economy is bleak because the productivity side of the economy (supply side) degrades due to insufficient demand for production in the present. The persistent low aggregate demand is, according to these theorists, causing the U.S. economy to face a new normal of slower economic growth.

Fears of sustained insufficient aggregate demand has led to the re-emergence of Alvin Hansen's theory of *secular stagnation*.¹³ During the late 1930s, Hansen argued that the U.S. economy was no longer able to generate sufficient economic growth due to declining population growth and low capital investment. Many believe the same today.

In his 2013 speech, Summers invoked Hansen's secular stagnation theme to highlight his belief that the U.S. economy was now stuck in a low-growth predicament.¹⁴ Summers argues that low (near zero) inflation, a growing demand for safe assets, a declining demand for physical capital from innovative IT firms, and an excess supply of savings over investment have caused "a substantial decline in the equilibrium or natural real rate of interest".¹⁵

In fact, the short-term inflation-adjusted (real) interest rate is now negative according to Summers. However, nominal interest rates (the actual rate borrowers pay and lenders receive) are constrained by the zero lower bound. Why lend \$100 to someone and receive \$97 next year (an interest rate of negative 3.0 percent) when you can simply hold on to the cash and have \$100 next year? If the real rate of interest (nominal rate of interest adjusted for inflation) is negative, then the zero lower bound means that the market rate of interest will likely be too high, and the amount of investment in the economy will be too low (one aspect of the insufficient aggregate demand problem).

Due to these conditions, observers note that it will be difficult for the U.S. economy to grow at its historical rate.¹⁶ Based on the potential output projections from the Congressional Budget Office (CBO), Summers documents that the U.S. economy's potential output in 2014 was 10 percent below what CBO had previously projected potential output would be in 2014. This decline in CBO's projection of the U.S. economy's potential growth rate, according to Summers, is due to reduced capital investment and less overall employment opportunities for people.

There are traditional Keynesian policy prescriptions that, according to Summers, could help the economy escape the negative consequences created by the problem of insufficient aggregate demand.

There are traditional Keynesian policy prescriptions that, according to Summers, could help the economy escape the negative consequences created by the problem of insufficient aggregate demand. One option for stimulating aggregate demand is through fiscal policies such as tax reform, export promotion policies, and public investments (with a particular emphasis on the desirability of public investments). In clarifying his position, Summers explains the value of fiscal policy by

Imagin[ing] a secular stagnation world with a zero real interest rate. Then, government debt service is very cheap. As long as a public investment project yields any positive return it will generate enough revenue to service the associated debt. This effect will be magnified if there are any Keynesian fiscal stimulus effects of the project or if there are any hysteresis effects. [Hysteresis effects occur when the growth potential of the economy becomes permanently lower because workers are unemployed for a long time or capital is under-used for a long time.] Notice that with sufficiently low real interest rates, even fiscal stimulus, which does not have supply effects, can pay for itself through multiplier effects.¹⁷

Importantly, the value of the work done or output produced is not the primary justification for the increased spending. Compensating for the insufficient aggregate demand from the private sector is. In response to this feared new normal, many economists are now advocating these Keynesian ideas that were espoused from the 1930s until they were discredited in the 1960s/1970s.¹⁸

Prior to the Great Recession, advocates of aggregate demand management typically viewed monetary policy as the preferred option. And, while Summers theoretically concurs that one option to stimulate aggregate demand is for the Federal Reserve to lower real interest rates even further (such as those advocates of negative real interest rates), consistent with the Keynesians of the 1930s, fiscal policy is the preferred method to spur the U.S. economy toward its potential. As DeLong, Summers, and Ball (2014) state:

At present and going forward, activist fiscal policy is likely to be essential for the American economy to operate near potential levels of output and employment. This conclusion is a substantial change in view from the near-consensus of economists that monetary policy alone could and should be left to carry out the stabilization policy mission, a view that prevailed for nearly a generation prior to the 2008 financial crisis.¹⁹

Summers is not the only New Keynesian to recommend extraordinary fiscal activism as a means to encourage long-term economic growth post the Great Recession. Paul Krugman advocates for what is, perhaps, the most unprecedented increase in government expenditures as a means to sufficiently stimulate aggregate demand. Echoing Summers, Krugman argues that real interest rates are trending downward, the zero interest lower bound is constraining the effectiveness of monetary policy, and population growth is declining limiting growth in aggregate demand.²⁰ As a consequence, activist fiscal policy is necessary to stimulate aggregate demand and spur economic growth.

In a 2014 publication, the Centre for Economic Policy Research (CEPR) compiled research from more than a dozen economists asking whether a period of secular stagnation has taken hold since the Great Recession (including Summers and Krugman discussed above).²¹ Overwhelmingly, the answer was yes; and, the named cause was insufficient aggregate demand. While some points of disagreement exist, the editors noted a general consensus on three points:

- First, a workable definition of secular stagnation is that negative real interest rates are needed to equate saving and investment with full employment.
- Second, the key worry is that secular stagnation makes it much harder to achieve full employment with low inflation and a zero lower bound (ZLB) on policy interest rates. ...
- Third, it is too early to know if secular stagnation is more than just old-fashioned slow growth, but economists and policymakers should start thinking hard about what should be done if secular stagnation materializes the old macroeconomic toolkit is inadequate.²²

Structural slowdown, or policy slowdown?

Attempts to explain the current period of slow economic growth in terms of insufficient aggregate demand, overlook key causal factors that drive economic activity in a market economy. As John Taylor (Stanford University) emphasized in a 2014 *Wall Street Journal* editorial, "in the current era, business firms have continued to be reluctant to invest and hire, and the ratio of investment to GDP is still below normal. That is most likely explained by policy uncertainty, increased regulation, including through the Dodd Frank and Affordable Care Act..."²³

As Hayek (1945) noted, a market economy relies on a well-functioning price system to convey accurate information regarding scarcity and consumer desires.²⁴ This well-functioning price system includes the prices for consumer or producer goods; it also includes the risk-adjusted after-tax returns to debt and equity, adjusted for inflation. The risk-adjusted returns define the incentives for businesses and entrepreneurs to invest in alternative ventures, business lines, and activities.

The insufficient aggregate demand theories do not account for the policy environment's impact on the efficiency of the price discovery mechanism. Adherents to the New Keynesian School are, consequently, failing to consider a primary causal factor in the structural economic slowdown that appears to have taken hold. Referring back to Figures 1 and 2, an important distinction between the periods of robust economic growth and weak economic growth is the policy environment.

The policy environment is comprised of the government's fiscal, monetary, regulatory, and trade policies. Each policy component has a specific role to play, and when each component is dedicated toward efficiently meeting its properly defined role (the ideal government policies), robust economic growth is the norm. Furthermore, ideal government policies focus on an economy's long-run structural growth path – not the short-term economic fluctuations that often occur. Policies that maximize the economy's structural growth path will maximize the economy's short-run performance as well by minimizing policy-driven short-term fluctuations in economic growth.

When economic policies are closer to the ideal policy environment, the myriad economic price signals that make up the economy more accurately reflect people's desires and production possibilities. The incentives to create new and innovative techniques and products are strong. And with a clearer understanding of market prices, workers, businesses, investors, and entrepreneurs are all better able to efficiently allocate their capital and labor. The positive market processes that follow enable sustainable, broad-based, and robust economic growth.

During the periods of robust economic activity visualized in Figures 1 and 2, government policies, while still lacking in many areas, were more consistent with this policy ideal than the periods of weak economic activity. For instance, tax reforms during the 1980s, when coupled with monetary policies that promoted price stability, set the stage for the remarkable economic growth that took hold during the 1980s and 1990s.

In contrast, during the periods of weak underlying economic growth, government policies tended to deviate, sometimes wildly, from the ideal policy environment. Government policies dis-

Due to the current policy mix, the economy's underlying incentives have worsened, resulting in a policy-induced growth gap.

torted prices, destroyed value by spending government resources on low value projects, imposed distortionary taxes with high marginal rates, and promulgated overly-burdensome regulations. When the policy environment creates distortions, or promotes rent-seeking activities at the expense of market-based activities, economic growth stagnates. The results from unsound economic policies are exemplified by the recovery following the 2007-2009 crisis.

Ineffective policies were, and continue to be, promulgated in each one of the policy areas since the 2007-2009 crisis ended (the crisis itself arose from poor economic policies). With respect to fiscal policy, expenditures are too high and skewed toward lowered valued projects; and, revenues are raised using an excessively burdensome tax system.

Monetary policy is attempting to manage short-term economic fluctuations at the expense of its core responsibilities of price stability. Regulatory policies are overly-burdensome and unpredictable; and, trade policies are reducing the potential gains from increased global trade. Driving this worsening policy environment is the short-term, activist focus of government policies (especially in regards to fiscal and monetary policies) that distracts policymakers from what should be each policy's primary goal.

Due to the current policy mix, the economy's underlying incentives have worsened, resulting in a policy-induced growth gap. As a result of this growth gap, the U.S. economy is now enduring a sub-par job market, stagnant average incomes, a shrinking middle class, and a general malaise that generates a belief that the rising tide no longer lifts all boats.

These consequences are common when an economy suffers through a weak growth path. Therefore, the current slow growth economic environment is not pre-ordained. Nor is the secular stagnation a result of insufficient aggregate demand. The current economic environment is the expected result of the current policy environment and thus requires a fundamental shift in economic policies to correct.

Long-term economic growth can be regained once a policy environment that promotes broad-based and sustainable economic growth is implemented. Just like in the 1970s, the "slow growing" economy of the 2000s is not inevitable – after all, four years after President Carter's Malaise Speech it was *Morning in America Again*.

The current economic environment is the expected result of the current policy environment and thus requires a fundamental shift in economic policies to correct.

Establishing a pro-growth policy mix

The Pacific Research Institute's macroeconomic research program, *Beyond the New Normal*, examines the integral connection between the mix of economic policies and economic growth. The research program illustrates that strong economic growth occurs when the policy environment:

- Empowers the private sector to efficiently employ capital, labor, and technology;
- Discourages value destroying rent-seeking behavior; and,
- Provides core public goods as efficiently as possible.

The research program begins by addressing the need for more in-depth economic measures that gauge the economy's incentive structure and the financial health of the private sector economy. Currently, there is a bias in the macroeconomic metrics toward measuring aggregate demand, which makes sense given policymakers' bias toward implementing activist policies that, while ill-fated, are designed to manage short-term fluctuations in aggregate demand. The oft-heard proclamation that fiscal and monetary policy need to encourage consumer spending (part of aggregate demand) in order to stimulate the economy exemplifies the bias.

The focus on aggregate demand obscures key trends regarding economic incentives and the production side of the economy. Just as an analysis of a company's financial health requires a detailed review across a wide array of different, but complimentary, performance measures, so too does an understanding the U.S. economy. Without these considerations, an important link between economic policies and economic outcomes is lost.

Toward this goal, the next paper addresses the importance of distinguishing between government spending and private spending. Government spending is fundamentally different from private spending because, unlike private expenditures, not all government expenditures will add value to the economy, on net. When a private transaction occurs, by its voluntary nature, that activity adds value to the economy. For instance, when consumers purchase cars from a car dealer

they are illustrating that the value of the car is worth more to them than the money they must spend in order to obtain it. Simultaneously, the dealer is illustrating that the value of the money he or she accepts in exchange for the car is of greater value than holding on to the car. In economic parlance, the marginal benefits from the transaction equal the marginal cost, therefore the transaction is growth enhancing. Of course, mistakes occur. Some private transactions turn out to be wrongheaded – the Ford Edsel being a classic example. But, when private transactions destroy value the losses they create incent people to stop these activities – Ford discontinued production of the Edsel after the 1960 model year, two years after unveiling it.

Government expenditures, on the other hand, have no immediate feedback mechanism that illustrates when expenditures are adding value, and when they are not. Nor is there an automatic correction mechanism that siphons resources away from the value destroying government activities. Value destroying government activities have, as a consequence, a greater propensity to persist.

Finally, the lack of a market value for government expenditures creates an additional difficulty. By the definition of GDP, when the federal, state, or local governments spend a dollar hiring people or purchasing equipment, the expenditure increases GDP by one dollar. But, these are the costs of providing the public goods and services, they do not necessarily reflect the value of these goods and services, which is what GDP is designed to measure. Mixing government expenditures (which may or may not represent the value of the public goods and services) with private expenditures (which does represent the value of the public goods and services) raises many problems.

In light of the differences between government consumption and investment expenditures and private consumption and investment expenditures, it is important to account for government activities separately from private activities.

In light of the differences between government consumption and investment expenditures and private consumption and investment expenditures, it is important to account for government activities separately from private activities. This government accounting tracks the size, composition, and financing of government activities, and connects the costs from government spending to proxies of the benefits.

The third paper creates a broader perspective on the private economy by reworking key economic data from, among other sources, the Bureau of Economic Analysis' National Income and Product Accounts (NIPA) and the Federal Reserve's Flow of Funds data. The purpose of reworking

these data is to create a set of informative accounting measures that provide additional insight into the health and sustainability of private production (the supply-side of the economy) and the link between economic policies and economic incentives.

The economic measures introduced more fully account for the sustainability of production; the influence of government activities on the returns to working, saving, and producing; and, how changes in production opportunities and government activities influence the market incentives that drive economic behavior. These concepts are developed by applying key income and balance sheet metrics to the macro-economy, and by connecting key consumer and asset prices to changes in output and the asset base.

Leveraging the findings of these papers, a pro-growth policy framework is developed next.

Leveraging the findings of these papers, a progrowth policy framework is developed next. The policy framework begins from the observation that all economic output is created by the factors of production that include capital (or the machines and equipment used to create goods and services), labor (or the effort people employ to create goods and services), technology (or the knowhow people employ to create goods and services), and entrepreneurship (or the vision to produce innovative goods and services). Whether people are able to productively employ the factors of production depends upon the economic incentives, which are the driving force of the economy.

Economic growth flourishes when entrepreneurs are incented to take risks, create new goods and services, and/or invent new production techniques. Similarly, economic growth is promoted when people are incented to work, save, and invest. Positive and stable economic incentives are fundamental to generating robust economic growth over the long-term.

Economic policies meaningfully influence the prices and incentives that drive economic behavior (both positively and negatively). When economic policies distort prices, or create growth-detracting incentives, the inefficiencies diminish the incentives to work, save, invest, and engage in entrepreneurial activities. Lower incentives to engage in productive activities causes economic growth to suffer. The reverse occurs when economic policies promote price stability and establish positive growth incentives. The policy environment is a key driver of long-term economic growth because the manner in which all of the other key drivers of economic growth are employed – capital, labor, and technological innovation – are meaningfully influenced by the policy environment.

Importantly, there is a tension between the economic policies that promote a strong and sustainable long run growth path and economic policies that attempt to manage short-term economic fluctuations. Consequently, economic growth is optimized when each government policy focuses on long-term economic sustainability rather than attempts to use economic policies as interchangeable tools that manipulate aggregate demand in order to manage short-term economic fluctuations.

Economic policies focus on long-term economic sustainability by fulfilling the unique roles each policy area should play. The primary focus for each economic policy area should be the specified and targeted goals that are consistent with each policy.

The purpose of fiscal policy is to provide public goods in the most efficient means possible. This includes prioritizing government spending toward value creating public goods (regardless of the business cycle's state), and imposing taxes with low-marginal tax rates that minimize economic distortions.

The proper role for monetary policy, as identified by Nobel laureate Robert Mundell (1971), promotes price stability. ²⁵

Regulatory policy should establish the market rules and manage negative externalities, such as pollution. Regulations should be no more complex than necessary and impose the fewest possible burdens on the economy. Effective trade policy expands the benefits of the free exchange of goods and services beyond the domestic borders.

The fourth paper establishes the broad framework that illustrates how an economy's long-term growth path (whether weak or strong) is fundamentally influenced by the policy mix implemented. The results of the two preceding papers on "Issues of Economic Measurement" will be leveraged to show that the impact on growth from the current policy mix is more severe than is commonly accepted. After formulating this framework, the fourth paper illustrates its applicability through a review of the post WWII economic history from the perspective of the policy framework. Future papers will then examine each economic policy component in greater detail (fiscal, monetary, regulatory, and trade) in order to benchmark the proper role of each policy component separately, and then finally together as one comprehensive approach to economic policy.

A central theme of the policy framework is that "this time is not different". Throughout history analysts that have argued this refrain in order to justify unprecedented asset valuations or the need for unprecedented policy actions are inevitably shown to be wrong. With respect to economic policies, there are fundamental principles that, when adhered to, encourage sustainable and robust economic growth. When the principles are violated, however, economic stagnation sets in.

The goal of the *Beyond the New Normal* research program is to counter the narrative that the growth potential of the U.S. economy is now slower than it used to be because "this time is different". Future U.S. economic growth can meet, or even exceed, past growth trends. What is needed are the economic policies to enable it.

Endnotes

- To account for the impact of the business cycle, comparisons will examine the data based on either a peak-to-peak or trough-to-trough basis.
- Excluding the deep recession that occurred between 1981 and 1982, the average growth rate over the period was 3.10 percent, only slightly below the overall average growth rate. However, the severity of the 1981-82 recession is directly linked to the policy consequences from the 1970s (particularly the inflationary impacts). Additionally, many analysts treat the 1980 recession and the 1981-82 recession as one long economic downturn. In consideration of both of these issues, we include the period through 1982 QIV as the ending point for this sub-period.
- Plosser, Charles I., "Shocks, Gaps, and Monetary Policy", *Speech to the Korea-American Economic Association*, January 4, 2004. (emphasis added).
- Bernanke, Ben, "Why are interest rates so low, part 2: Secular Stagnation" *Ben Bernanke's Blog*, 2015; http://www.brookings.edu/blogs/ben-bernanke/posts/2015/03/31-why-interest-rates-low-secular-stagnation. The Hamilton et al. paper referenced by Bernanke is: Hamilton, James D., Ethan S. Harris, Jan Hatzius, and Kenneth D. West, "The Equilibrium Real Funds Rate: Past, Present and Future" the U.S. Monetary Policy Forum, New York City, February 27, 2015. See: http://www.federalreserve.gov/newsevents/speech/bernanke20120831a. htm, and http://www.federalreserve.gov/newsevents/speech/bernanke20121120a.htm for the speeches referred to in the text.
- Rogoff, Kenneth, "Debt supercycle, not secular stagnation" *Vox CEPR's Policy Portal*, April 22, 2015; http://voxeu.org/article/debt-supercycle-not-secular-stagnation.
- 6 Lo, Stephanie and Kenneth Rogoff, "Secular stagnation, debt overhang, and other rationales for sluggish growth six years on", *BIS Working Papers* No. 482, January 2015; http://www.bis.org/publ/work482.pdf.
- 7 "Summary of The Budget and Economic Outlook: 2016 to 2026", Congressional Budget Office, January 19, 2016; https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51129-2016_Outlook_Summary.pdf.
- 8 "Summary of The Budget and Economic Outlook: 2016 to 2026", Congressional Budget Office, January 19, 2106; https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51129-2016_Outlook_Summary.pdf.
- 9 Gordon, Robert J., "The Economics of Secular Stagnation, Secular Stagnation: A Supply-Side View", *American Economic Review: Papers & Proceedings* 2015, 105(5): 54–59; http://piketty.pse.ens.fr/files/Gordon2015.pdf.
- 10 Gordon, Robert J., "The Economics of Secular Stagnation, Secular Stagnation: A Supply-Side View", *American Economic Review: Papers & Proceedings* 2015, 105(5): 54–59; http://piketty.pse.ens.fr/files/Gordon2015.pdf.
- 11 Cowen, Tyler, The Great Stagnation: How America ate all the low-hanging fruit of modern history, got sick, and will (eventually) feel better, Penguin Group, 2011.

- Hall, Robert E. (2014) "Quantifying the Lasting Harm to the U.S. Economy from the Financial Crisis", *NBER Working Paper* No. 20183 (May).
- 13 Hansen, Alvin, "Economic Progress and Declining Population Growth", *American Economic Review*, March 1939. The re-emergence of the term secular stagnation is largely attributed to a 2013 speech to the IMF by Larry Summers; for a video of Larry Summers speech to the 14th Annual IMF Research Conference "Crises Yesterday and Today" November 8, 2013 see: http://investmentwatchblog.com/larry-summers-at-imf-economic-forum-nov-8/.
- 14 For a video of Larry Summers speech to the 14th Annual IMF Research Conference "Crises Yesterday and Today" November 8, 2013 see: http://investmentwatchblog.com/larry-summers-at-imf-economic-forum-nov-8/.
- Summers, Lawrence H., "U.S. Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound" *Business Economics*, Vol. 49, No. 2, 2014; http://larrysummers.com/wp-content/uploads/2014/06/NABE-speech-Lawrence-H.-Summers1.pdf.
- 16 Summers suggests that economic growth can be accelerated in the short-term by allowing financial bubbles to develop, however, such growth is unsustainable and will inevitably crash. Therefore, without corrective policy, strong economic growth while maintaining a stable financial sector is not feasible under the current conditions according to Summers.
- 17 Summers, Lawrence, "On secular stagnation: Larry Summers responds to Ben Bernanke" Brookings Institution, April 1, 2015; https://www.brookings.edu/2015/04/01/on-secular-stagnation-larry-summers-responds-to-ben-bernanke/.
- In a forthcoming piece the authors will argue that there is a meaningful difference in the economic impact from government spending depending on the use of funds.
- 19 DeLong Brad, Larry Summers, and Laurence Ball, "Fiscal Policy and Full Employment" *Center for Budget and Policy Priorities*, April 2, 2014.
- Krugman, Paul, "Four observations on secular stagnation" "Secular Stagnation: Facts, Causes and Cures" eds. Teulings, Coen and Richard Baldwin London, 2014, *VoxEU.org eBook* p. 61 68.
- 21 Coen, Teulings and Richard Baldwin (eds) (2014) "Secular Stagnation: Facts, Causes and Cures" Centre for Economic Policy Research
- 22 Coen, Teulings and Richard Baldwin (eds) (2014) "Secular Stagnation: Facts, Causes and Cures" Centre for Economic Policy Research
- Taylor, John B., "The Economic Hokum of 'Secular Stagnation': Blaming the market for the failure of bad government policies is no more persuasive now than it was in the 1930s." *Wall Street Journal*, January 1, 2014; http://www.wsj.com/articles/SB100014240527023048581045792639534 49606842.
- 24 Hayek, Friedrich A., "The Use of Knowledge in Society" *American Economic Review* XXXV No. 4, 1945, pp. 519-30.
- 25 Mundell, Robert A., "The Dollar and the Policy Mix: 1971" Essays in International Finance, No 85, May 1971.

About the Authors

Wayne H. Winegarden, Ph.D. is a Senior Fellow in Business and Economics, Pacific Research Institute, as well as the Principal of Capitol Economic Advisors and a Contributing Editor for EconoSTATS at George Mason University.

Dr. Winegarden has 20 years of business, economic, and policy experience with an expertise in applying quantitative and macroeconomic analyses to create greater insights on corporate strategy, public policy, and strategic planning. He advises clients on the economic, business, and investment implications from changes in broader macroeconomic trends and government policies. Clients have included Fortune 500 companies, financial organizations, small businesses, state legislative leaders, political candidates and trade associations.

Dr. Winegarden's columns have been published in the *Wall Street Journal*, *Chicago Tribune*, *Investor's Business Daily*, Forbes.com, and Townhall.com. He was previously economics faculty at Marymount University, has testified before the U.S. Congress, has been interviewed and quoted in such media as CNN and Bloomberg Radio, and is asked to present his research findings at policy conferences and meetings. Previously, Dr. Winegarden worked as a business economist in Hong Kong and New York City; and a policy economist for policy and trade associations in Washington D.C. Dr. Winegarden received his Ph.D. in Economics from George Mason University.

Niles Chura is the Founder of Ouray, LLC with responsibility for setting investment strategy and decisions as well as monitoring policies and managing portfolio risk. Mr. Chura is a seasoned finance professional with experience in the asset management, banking and corporate sectors. Prior to working in finance, he served overseas as a field artillery officer in the U.S. Army. Mr. Chura received an M.B.A. with a finance concentration from Yale University and a B.A. in economics and government from The College of William & Mary. His thoughts on macroeconomic risks have been published by Forbes.com and Laffer Associates and he has lectured at several leading universities, including The University of Virginia, Georgetown University and The College of William & Mary.

About Pacific Research Institute

The Pacific Research Institute (PRI) champions freedom, opportunity, and personal responsibility by advancing free-market policy solutions. It provides practical solutions for the policy issues that impact the daily lives of all Americans, and demonstrates why the free market is more effective than the government at providing the important results we all seek: good schools, quality health care, a clean environment, and a robust economy.

Founded in 1979 and based in San Francisco, PRI is a non-profit, non-partisan organization supported by private contributions. Its activities include publications, public events, media commentary, community leadership, legislative testimony, and academic outreach.