BEYOND THE NEW NORMAL

Establishing a Pro-Growth Economic Policy Environment

4

Policy Mix Theory and Historical Evidence

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Beyond the New Normal

Establishing a Pro-Growth Economic Policy Environment

PART IV

Policy Mix Theory and Historical Evidence

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Beyond the New Normal
Establishing a Pro-Growth Economic Policy Environment
Part 4: Policy Mix Theory and Historical Evidence

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Introduction

Past is not prologue when it comes to economic growth. Simply because a country's historical growth has been strong, and economic prospects look bright, does not guarantee that the future will be prosperous. The economic history of Argentina exemplifies the potential consequences. As documented by *The Economist*, during:

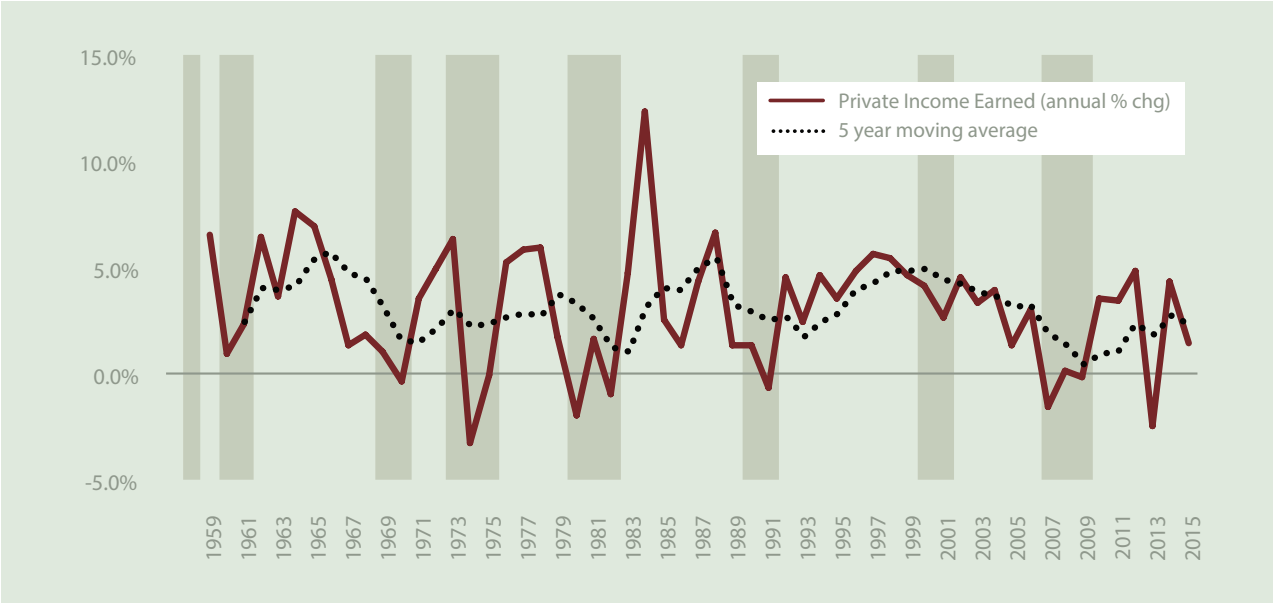
> the period before the outbreak of the first world war…the country [Argentina] could claim to be the world's true land of opportunity. In the 43 years leading up to 1914, GDP had grown at an annual rate of 6 percent, the fastest recorded in the world. The country was a magnet for European immigrants, who flocked to find work on the fertile pampas, where crops and cattle were propelling Argentina's expansion. In 1914 half of Buenos Aires's population was foreign-born.
>
> The country ranked among the ten richest in the world, after the likes of Australia, Britain and the United States, but ahead of France, Germany and Italy. Its income per head was 92% of the average of 16 rich economies. From this vantage point, it looked down its nose at its neighbors: Brazil's population was less than a quarter as well-off. It never got better than this.[1]

Due to recurring economic crises that began in the 1930s, Argentina's economy is now the 21st largest in the world; it is also smaller than Brazil's.[2] Argentina's experience holds important lessons for the U.S., particularly considering the slow economic growth that has plagued the U.S. economy since the turn of the 21st Century.

First, global economic leadership can be lost. Robust historical growth, and even bright growth prospects, are no guarantee of future economic prosperity. Future growth must be cultivated. Second, economic policies matter. While there are many causal factors behind Argentina's relative economic decline, poor economic policies and rampant political instability are generally considered important contributors to the country's troubles. Stated alternatively, it is the responsibility of governments to foster economic growth through the implementation of an effective mix of policies.

Taking a long-run perspective, and in contrast to Argentina, the U.S. has generally implemented effective economic policies that encourage sustainable growth. Since 1958, total U.S. private sector output grew at an average annual rate of 3.0 percent, see Figure 1. Figure 1 compares the growth in private sector output to the 5-year moving average growth rate, illustrating that the U.S. economy has deviated from the average growth path, sometimes by wide margins. And, while these deviations pale in comparison to Argentina's volatility, the implications from these changes are meaningful with respect to the average U.S. living standards. The premise of the *Beyond the New Normal* research program is that substantive changes in economic policies (the economic policy mix) have played a meaningful role in these historical growth discrepancies.

FIGURE 1. Percent Change in Inflation Adjusted Private Income
1958 – 2015



Source: Author calculations based on data from the U.S. Bureau of Economic Analysis, NIPA Accounts

More precisely, the economic policy mix has alternated between periods of expanding and declining government influence in the economy. In response, economic outcomes have predictably vacillated between periods of weaker structural economic growth and periods of robust structural economic growth. Perhaps more important, considering the weaker than average growth witnessed since 2000, the optimistic lesson from history is that improvements in the current U.S. economic policy mix can meaningfully increase the current sub-par economic growth performance evident in Figure 1.

The purpose of this paper is to connect the key turning points in the U.S. economy's structural growth path between 1958 and 2015 to fundamental changes in the chosen economic policy mix. The full policy mix includes the government's fiscal policies, monetary policies, regulatory policies, industrial policies, and trade policies; however, the focus of this analysis will be on the fiscal and monetary policy areas, with only an occasional, and superficial, review of regulatory policy.[3]

There are two inter-related premises regarding policy that, if followed, foster robust economic growth. First, policies are most effective when they focus on creating long-term value. Fiscal and monetary policies should not attempt to manage the economy's short-term fluctuations by attempting to stimulate the economy during recessions or reduce the economy's growth rate during expansions. Second, in executing on its long-term mission, each economic policy area should focus on effectively executing its unique role, or, in other words "stay in its lane".

Although fiscal and monetary policies fall short of these core tenets, the policy mix has, at times, resembled a more ideal environment more closely; while at other times, the policy environment has differed dramatically. These changes in the policy environment are associated with predictable deviations in the underlying growth path of the economy.

To illustrate the connections between the policy mix and the underlying economic growth path, we first describe the benchmarks (e.g. a pro-growth policy mix) against which we evaluate the different fiscal and monetary policy regimes. Once these benchmarks are established, we next identify key economic turning points, or *pivots*, that occurred during the 1958 through 2015 period. A pivot is defined as a limited period where the structural growth path of a broad set of economic metrics all changed. The analysis identifies four distinct economic growth paths over the 1958 and 2015 period.

Having identified the structural changes in the economy's growth path, we then illustrate that each one of the pivot points can be connected to specific shifts in the economic policy mix (e.g. changes in the combined fiscal and monetary policy environment) relative to the established policy mix benchmarks.

The implication from this consistent relationship between the broader policy environment and underlying economic performance is that the policy mix plays an important role in determining the economy's structural growth path. When the policy mix is closer to the identified policy benchmarks, the structural economic growth path is stronger. When the policy mix strays from the identified benchmarks, the structural economic growth path is weaker.

With respect to the current period of slow economic growth, the implications from this historical review are straightforward: Economic growth can be revitalized, but such a revitalization requires comprehensive economic policy reforms. This optimistic outlook contrasts with the secular stagnation theories discussed in the "Overview" to the *Beyond the New Normal* study (Paper 1) and suggests there is a defined pathway to regaining a more robust economic future.

Fiscal policies should focus on providing value-added public services over the long-term

Too often fiscal policy focuses on short-term, often politically expedient, considerations to the detriment of long-term stability. The structural deficits of Social Security and Medicare at the federal level, and the underfunded public pensions at the state and local level, exemplify the short-term fiscal policy bias. Some of the short-term bias can be attributed to the incentives of politicians to provide constituents with benefits today while deferring the costs of the program until tomorrow.[4] Some of the bias, however, is based on the Keynesian/New Keynesian economic policy prescriptions.

Keynesian economic policy encourages fiscal authorities to manage short-term economic fluctuations (e.g., the business cycle) by stimulating the economy during economic recessions. These stimulative fiscal policies are predicated on several beliefs. First, in response to an economic downturn, it is both possible, and appropriate, for economic policy makers to increase any component of aggregate demand (consumption expenditures, investment expenditures, or government expenditures) to stimulate the economy; and, second, while increases in any component of aggregate demand is beneficial, increases in consumption expenditures or government expenditures are the most impactful.

These premises are false.

The argument for stimulative economic policies is based on the theory that recessions occur due to a reduction in one of the expenditure components of aggregate demand (typically private consumption or private investment). Due to this decline, overall aggregate demand falls below the economy's production potential. Worsening the underperformance problem, employers may be unable to hire as many workers as before due to the decline in revenues, further increasing the problem of unemployment. The larger number of unemployed people, when coupled with the fear of becoming unemployed, leads to even more expenditure retrenchment (e.g. a further reduction in aggregate demand) creating a vicious cycle of declining economic prospects.

An increase in government expenditures supposedly offers an off-ramp from this vicious cycle. In response to the decline in private consumption or private investment, the government can increase its expenditures, thereby raising total aggregate demand to the economy's potential. Not only do these expenditures end the recession, they also prevent the vicious cycle from developing, saving the economy from a potentially deeper recession.

As a simplified example of this logic, imagine an economy that has the potential to produce $1,000 worth of consumption and private investment output. However, for whatever reason, consumers and investors are suddenly only willing to spend $990. The reduction in expenditures becomes a binding constraint on the economy, which is, consequently, one percent smaller than its production potential. Alternatively stated, the economy experiences a recession. Advocates of stimulative policies claim that increasing government expenditures fills the aggregate demand void. In the simplified example, if the government increased its expenditures by $10, total expenditures would be back to $1,000 and the economy would be operating at its potential.

Unfortunately, the Keynesian solution does not add up. The Keynesian policy prescription will certainly, by definition, increase the total amount of government expenditures. But, it is not true that the increase in government expenditures will increase total aggregate demand. Keynesian stimulus policy does not account for the sources of the increased government expenditures, only the uses of it; on the contrary, a full accounting of both the sources and uses of government funds illustrates that the increased government expenditures must be financed by decreased private expenditures or decreased private savings. The decrease in private expenditures or private savings must offset the increase in government expenditures. There is no free lunch.

Going back to our simplified example, the extra $10 of government expenditures will be financed by either imposing taxes on the private economy of $10 or borrowing $10 from the private economy. Either way, the increased expenditures of the government must be offset, dollar for dollar, with decreased expenditures in the private sector at some point in time. Therefore, once the sources and uses

of the funds are considered, increased government expenditures will not increase overall aggregate expenditures (or aggregate demand). All it can do is change the composition of aggregate demand. As Cochrane (2009) explains:

> Most fiscal stimulus arguments are based on fallacies, because they ignore three basic facts.
>
> First, if money is not going to be printed, it has to come from somewhere. If the government borrows a dollar from you, that is a dollar that you do not spend, or that you do not lend to a company to spend on new investment. Every dollar of increased government spending must correspond to one less dollar of private spending. Jobs created by stimulus spending are offset by jobs lost from the decline in private spending. We can build roads instead of factories, but fiscal stimulus can't help us to build more of both. This form of "crowding out" is just accounting, and doesn't rest on any perceptions or behavioral assumptions.
>
> Second, investment is "spending" every bit as much as is consumption. Keynesian fiscal stimulus advocates want money spent on consumption, not saved. They evaluate past stimulus programs by whether people who got stimulus money spent it on consumption goods rather than save it. But the economy overall does not care if you buy a car, or if you lend money to a company that buys a forklift.
>
> Third, people must ignore the fact that the government will raise future taxes to pay back the debt. If you know your taxes will go up in the future, the right thing to do with a stimulus check is to buy government bonds so you can pay those higher taxes. Now the net effect of fiscal stimulus is exactly zero, except to raise future tax distortions. The classic arguments for fiscal stimulus presume that the government can systematically fool people.[5]

Studies that have examined the stimulative effect of government spending confirm these results. For instance, in a 2009 *NBER Working Paper,* Cogan et al. found that the estimated stimulus from fiscal policy is "extremely small".[6] After reviewing the evidence from the temporary tax rebates associated with stimulating the economy due to the 2001 and 2008 recessions, as well as proposed government expenditure policies, Taylor (2009), reevaluating an analysis he published in 2000, concluded that "there is little reliable empirical evidence that government spending is a way to end a recession or accelerate a recovery that rationalizes a revival of discretionary countercyclical fiscal policy."[7]

Mitchell (2005) provides a comprehensive review of studies that have examined the impact from government spending on growth from a U.S. perspective, as well as an international perspective.[8] Summarizing the findings from the academic literature, Mitchell (2005) concludes that "regardless of the methodology or model, government spending appears to be associated with weaker economic performance."[9] In a 2009 review, Foster similarly finds that "empirical research rarely provides a simple, single answer to a policy question, and examinations of Keynesian stimulus are no exception. Yet the available results consistently indicate that, using a modern macroeconomic model and treating monetary policy carefully, Keynesian stimulus's short-term effects lie somewhere in the narrow range between slim and none. Keynesian stimulus produces debt, not jobs."[10]

Longer-term consequences from fiscal policy short-termism

While there is no stimulus in short-term stimulus policies, there are adverse, longer-term consequences.

First, in practice, justifications for short-term government expenditures lead to excessively large government expenditures. As Public Choice theory highlights, fiscal policy is implemented by politicians that have specific interests that may not align with what would be considered the appropriate tenets of an effective stimulative fiscal policy prescription. Consequently, instead of simply increasing expenditures in response to a slower economy, the Keynesian reasoning behind government expenditures is easily utilized to justify an excessive (and ever-growing) amount of government spending. As Buchanan and Wagner (1977) noted:

> The pre-Keynesian norm of budget balance served to constrain spending proclivities so as to keep governmental outlays roughly within the revenue limits generated by taxes. The Keynesian destruction of this norm, without an adequate replacement, effectively removed the constraint. Predictably, politicians responded by increasing spending more than tax revenues, by creating budget deficits as a normal course of events.[11]

Therefore, even if targeted increases in government expenditures could stimulate the economy in the short-term, the incentives of the politicians executing that policy will thwart their effectiveness. The longer-term budget deficits and unfunded federal, state and local obligations (e.g. Social Security, Medicare, and public pensions) confirm the Buchanan and Wagner (1977) criticism.

Second, the dollars spent on government expenditures are a measure of costs, not a measure of value.[12] Consequently, there is no guarantee that the deficit-driven government expenditures are being spent on value accretive projects. To the extent that the government expenditures finance lower valued projects, then by transferring resources from higher valued uses in the private sector to lower valued uses in the government sector, increases in government expenditures will not stimulate economic growth but will harm economic growth, particularly in the longer-term.

Third, while fiscal policy does not stimulate the economy in the short-term, excessive government spending adversely impacts long-term economic growth.

As one example, large budget deficits *crowd out* private investment, which is a fundamental driver of an economy's long-run growth potential. As summarized by the Congressional Budget Office (CBO), "Increases in federal budget deficits affect the economy in the long run by reducing national saving (the total amount of saving by households, businesses, and governments) and hence the funds that are available for private investment in productive capital. Deficits thus "crowd out" private domestic investment in the long run. Less investment leads to a smaller stock of capital and lower output. Lower output and lower national saving lead to a lower standard of living for U.S. households than would otherwise be the case."[13] Specifically, the CBO estimates that "for each dollar's increase in the federal deficit, CBO's analyses reflect a reduction in national saving, ranging from 39 cents to 71 cents with a central estimate of 57 cents, and a reduction in domestic investment, ranging from 15 cents to 50 cents with a central estimate of 33 cents."[14] Therefore, large budget deficits compromise an economy's future economic growth performance.

The negative impact on long-term growth estimated by the CBO only accounts for the crowding out impact (e.g. deficits). However, the total amount of public sector spending matters as well. Government expenditures, like any other economic good, are subject to the economic reality of diminishing marginal returns. The Keynesian prescription leads to negative long-term consequences by encouraging an excessive amount of government expenditures such that there is an ever-widening gap between the diminishing marginal benefits from government expenditures and the rising marginal costs required to fund those expenditures. The result is that the current burden of government expenditures exceeds the level that is consistent with growth maximization.

In fact, Scully (1994, 1998, and 2006) confirms that the size of government expenditures relative to private expenditures has exceeded the growth maximizing level for many years. The additional tax revenues required to fund additional government expenditures impose a larger cost on the economy than the benefits derived from the government expenditures.[15] In these studies, Scully estimated the growth maximizing tax rate, or alternatively the optimal size of total federal, state, and local government expenditures over the long-term. Based on his findings, the growth maximizing tax rate ranges between 21 percent and 23 percent of GDP. For comparison, total federal, state, and local expenditures comprised 34 percent of GDP in 2015 – around 60 percent higher than the growth maximizing rate.[16]

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Then there is the composition of government spending. As documented in Paper II of the *Beyond the New Normal* research program "Accounting for Government", the composition of government expenditures has changed significantly over time, and those changes have skewed government expenditures away from providing public goods and services and toward transfer payments.

Adjusted for cyclical considerations, growing transfer payments as a share of the economy has reduced the economy's overall rate of growth. For example, in examining the impact of inflation adjusted transfer payments per capita on real per capita GDP (both in levels and growth) Gallaway and Vedder (2002) illustrated that "as the "transfer state" has grown in scope, the cumulative deadweight losses to the economy have increased until, during the bulk of the decade of the 1990s, they have driven real per capita levels of output to levels that are about one-eighth below what they might have been."[17] Similarly, Helms (1985) examining the growth impact at the state level between 1965 and 1979 found that when state tax revenues were used to fund transfer payments, state economic growth rates were negatively impacted.[18]

There are several take-aways from the above discussion:

- First, there is no lasting fiscal stimulus from discretionary fiscal policy.
- Second, adverse incentives bias government expenditures toward lower-valued projects that amplify the other costs associated with a discretionary, short-term focused, fiscal policy.

- Third, the typical justifications for stimulative government expenditures fall short. Moreover, their short-term focus can be detrimental to the economy's long-term economic health. These deleterious long-term implications occur because the short-term focus encourages excessive levels of government spending and creates incentives to defer the costs of government expenditures to future generations.
- Finally, the current composition of government spending, with its heavy emphasis on transfer payments, as well as the required tax burdens needed to support current expenditures, diminishes the economy's long-term growth prospects.

Fiscal policy from a long-term perspective

In contrast to the standard short-term fiscal mindset, fiscal policy should be implemented based on a long-term economic growth perspective that accounts for the expected net value from government expenditures. While creating a detailed estimate of the net value created from government expenditures is beyond the scope of this paper, and perhaps not even feasible, in "Accounting for Government", we argued that insights regarding the net value from government fiscal policy can be gained by evaluating the size and composition of government expenditures, the costs created when raising government revenues, and an evaluation of whether government expenditures are achieving value-added goals.

Starting with the benefits, some government spending, but not all, has the potential to create benefits on net and, when the composition of public goods and services are appropriate, these services form a basis from which private sector returns are enabled. Whether government expenditures have the potential to create benefits depends upon the purposes of the spending. There are two types of appropriate government expenditures that generate net value for society:

a) *Pure public goods*: Public goods and services that cannot realistically be made by the private sector but are necessary for society to function, such as defense or regulations; and

b) *Quasi-public goods*: Public goods and services that are not pure public goods, yet there are some public aspects to them; examples of quasi-public goods include infrastructure spending and education.

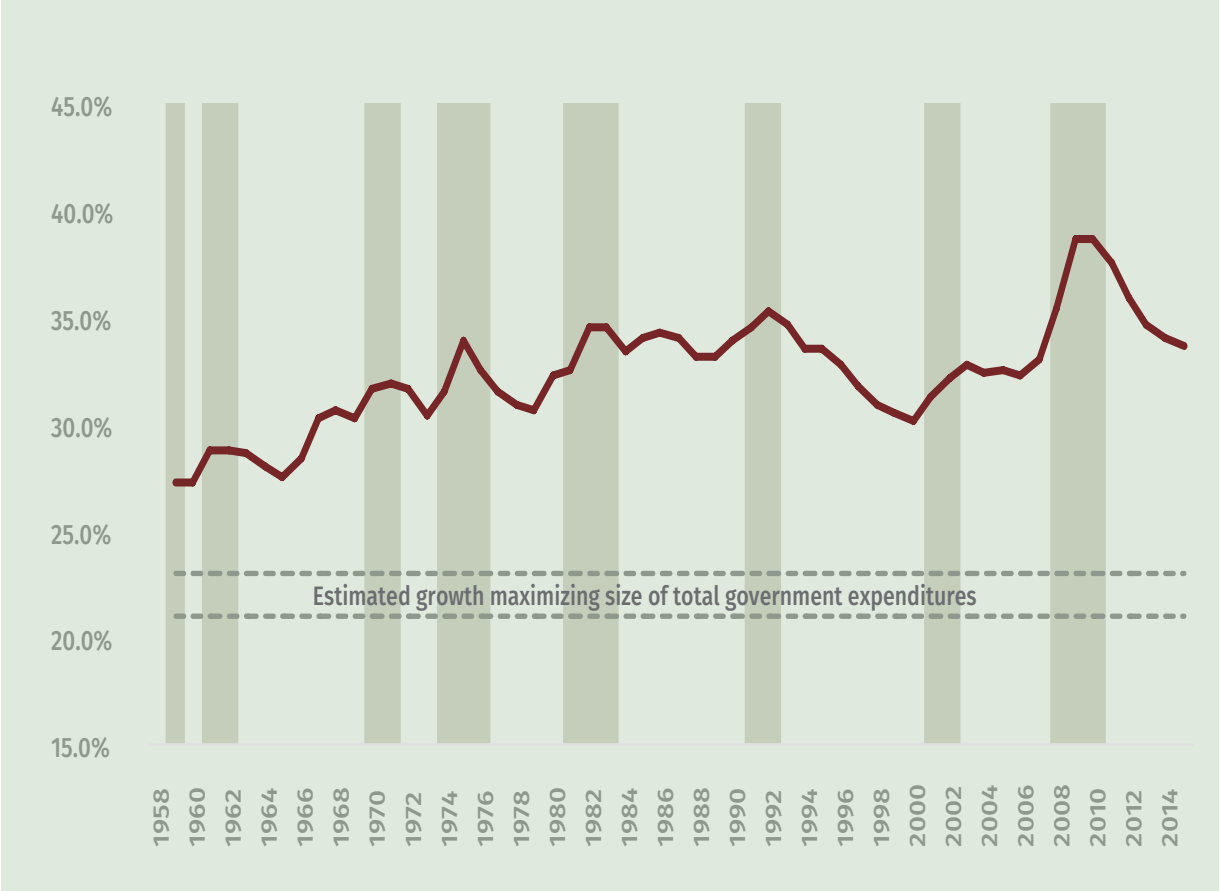
Spending on programs that are neither necessary (pure public goods) nor effective (quasi-public goods) will always have a sub-optimal return compared to the spending's alternative uses in the private sector, regardless of the stage of the business cycle. Such spending transfers resources from higher valued uses to lower valued uses and, consequently, destroys value.

Both categories of appropriate government spending can have positive returns, and should be justified based on the spending's potential net return to society after accounting for its costs, regardless of the stage of the business cycle. Before considering the costs, it is important to recognize that the value threshold for quasi-public goods will differ from pure public goods, and from one another, based on the *publicness* of the good. Take infrastructure spending as an example. Private toll roads can sometimes (often?) be an effective competitor to public roads. In the instances when a private toll road can provide consumers with these services more efficiently than the public sector, then the private sector should be empowered to provide these services, not the government. Quasi-public goods, consequently, have a competitive threshold to meet in addition to the cost of funds threshold all public goods and services must exceed.

Simultaneous with evaluating the composition of government expenditures, the proper amount of government expenditures must be determined. There are greater quantitative guidelines to help establish a growth enhancing size of government expenditures – for example, the aforementioned studies from Scully find that the growth maximizing size of government expenditures are around 21 percent to 23 percent of GDP. Summarizing this relationship, Scully (1998) finds that "beyond some point, especially when taxes are used mainly for transfer payments, they reduce incentives to produce enough that they lower the rate of economic progress."

Total government expenditures have consistently exceeded Scully's growth maximizing estimates; however, the gap between the current expenditure level and the growth maximizing expenditure level has varied over time as can be seen in Figure 2.

FIGURE 2. Actual Government Expenditures Relative to GDP Compared to Estimated Growth Maximizing Level of Government Expenditures Relative to GDP
1959 – 2015



Accounting for the impact from recessions on government expenditures, the underlying growth rates should be stronger during those periods when government expenditures were closer to this growth maximizing level and weaker during those periods when they far exceeded this growth maximizing level. This relationship is consistent with the historical record.

The costs of government expenditures include the alternative uses of these funds if they were left in the private sector (otherwise known as the opportunity cost), the costs of levying taxes or borrowing funds, the costs of complying with the tax code, and the incentive impacts created by levying the taxes. In the "Accounting for Government" paper, we estimated the average costs are between $1.16 and $1.27 for every dollar raised (based on a partial accounting of the average costs of raising government expenditures).[19] Lindsey (2013) estimates that the average cost to society is a much higher $1.50 per tax dollar raised. However, as he notes, "the government should consider the marginal costs versus the marginal benefits of a change in rates", and these marginal costs can be substantially higher than these average rates.[20]

Estimates for the total cost to society should also include the economic distortions or inefficiencies the program expenditures might create. For example, beyond the dollar costs from raising the tax dollars, ethanol subsidies create market distortions in the corn markets, fuel markets, and automobile markets (just to name a few). These distortions have adverse consequences, such as higher food prices, that should not be ignored. Government policies, particularly regulatory policies, can also create uncertainty in the private sector. Heightened uncertainty increases the risk premium, driving up the hurdle rate (the minimum rate an investor must receive to justify bearing the risk of investing/entrepreneurship), thus driving down the expected return on investment (ROI), for potential investments. A smaller ROI reduces private sector capital expenditures and investments and, therefore, harms future economic growth.

Estimates for the total cost to society should also include the economic distortions or inefficiencies the program expenditures might create.

Pulling these insights together, government expenditures that meet a net value threshold, such that the benefits created by government expenditures exceed the costs from raising those revenues, promote both short-term and long-term economic growth by ensuring that all government expenditures meet (or exceed) a rigorous net value benchmark.

With this net benefit test in mind, the historical review below illustrates that economic growth was more robust when the size of government expenditures relative to the private economy approached the growth maximizing rate, and less robust when the reverse was occurring; of particular importance are the trends in transfer payments share of government spending. A similar dynamic is visible in the tax burden and marginal tax rates. Lastly, activist fiscal policies that have attempted to manipulate the economy have also been associated with less robust economic growth over the long-term.

The implication from this review, which is developed more fully in the conclusion, is that the economy can regain a stronger economic growth path if fiscal policy concentrates on its role of providing key public goods and services that provide net positive value based on a long-term perspective.

Monetary policies should focus on establishing neutral money

Many New Keynesian economists believe monetary policy is an effective tool for stimulating, or cooling off, the economy; and therefore, argue that the Federal Reserve should have the discretion to employ monetary policy to actively manage short-term economic fluctuations. However, as with fiscal policy, both theory and the empirical record argue against using monetary policy to stabilize the business cycle. Instead, as summarized by Friedman (1968),

> the first and most important lesson that history teaches about what monetary policy can do – and it is a lesson of the most profound importance – is that monetary policy can prevent money itself from being a major source of economic disturbance. This sounds like a negative proposition: avoid major mistakes. In part it is. The Great Contraction [Great Depression] might not have occurred at all, and if it had, it would have been far less severe, if the monetary authority had avoided mistakes, or if the monetary arrangements had been those of an earlier time when there was no central authority with the power to make the kinds of mistakes that the Federal Reserve System made. …
>
> A second thing monetary policy can do is provide a stable background for the economy – keep the [monetary] machine well oiled…[21]

The implication of Friedman's insights is that there is a need for a monetary rule that constrains the behavior of the Federal Reserve; and, there are a growing number of monetary economists who, while vigorously debating the specific monetary rule, generally agree on the need to constrain the Federal Reserve's discretionary behavior. Selgin (1997) summarized the growing consensus among economists that monetary policy cannot effectively manage the economy (e.g. employment), stating that:

> Not long ago, many economists were convinced that monetary policy should aim at achieving 'full employment'. Those who looked upon monetary expansion as a way to eradicate almost all unemployment failed to appreciate that persistent unemployment is a non-monetary or 'natural' economic condition, which no amount of monetary medicine can cure. Today most of us know better: both theory and experience have taught us that trying to hold unemployment below its 'natural rate' through monetary expansion is like trying to relieve a hangover by having another drink: in both cases, the prescribed cure eventually makes the patient worse off.[22]

Meltzer (2014) similarly stated that "the Federal Reserve's excessive weight on near-term events and reluctance to follow rules explains both its current mistakes and many past errors."[23] Plosser (2014), the former President of the Federal Reserve Bank of Philadelphia, based on Milton Friedman's insights regarding what monetary policy can, and cannot, achieve argued that "we have assigned an ever-expanding role for monetary policy, and we expect our central bank to solve all manner of economic woes which it is ill-suited to address. We need to better align the expectations of monetary policy with what it is actually capable of achieving."[24]

Plosser states that the Federal Reserve is not capable of managing short-term economic fluctuations (e.g. its employment mandate); however, what it is actually capable of achieving is price stability over the long-term. Therefore, according to Plosser, the Federal Reserve's discretionary actions should be constrained with a policy rule that is designed to achieve a price stability mandate. In a different version of a monetary rule, McCallum and Sumner advocate for constraining the Federal Reserve by imposing a rule that targets the growth, or level, of the economy's total nominal income (or nominal GDP).[25]

While there are important differences between a nominal GDP target (as it is called) or a price stability target, it is evident that the largest performance discrepancies exist between periods when the Federal Reserve's policies more closely resemble a monetary policy rule and the periods when the Federal Reserve attempted to manage the economy's short-term fluctuations. Put more simply, economic performance is better when monetary policy is constrained by specific policy rules. As Meltzer (2014) noted, "history has an important message for theory and policy. The two longest periods of stable growth, low inflation, and mild recessions are the years when the Federal Reserve was guided by a rule."[26]

The goal of the monetary policy rule should be to avoid distortions in the economy's capital structure, ensure that money has a neutral impact on prices and the allocation of credit, and not incent profligate fiscal policy.

As identified in the historical review below, when monetary policy does not follow an appropriate monetary rule, the term structure of real interest rates and real returns on investment become distorted (e.g. distorting the capital structure) and economic growth becomes more volatile and slower. Discretionary monetary policy can, at times, also enable bad fiscal policies. As an extreme case, Plosser (2014) noted that the recent extraordinary policies by the Federal Reserve

> …has done more than just purchase lots of assets; it has altered the composition of its balance sheet through the types of assets it has purchased. I have spoken on a number of occasions about my concerns that these actions to purchase specific (non-Treasury) assets amounted to a form of credit allocation, which targets specific industries, sectors, or firms. These credit policies cross the boundary from monetary policy and venture into the realm of fiscal policy.[27]

For our purposes, distinguishing between the economy's performance when the Federal Reserve is guided by a rule from the economy's performance when the Federal Reserve changes the stance of monetary policy based on the discretion of the monetary policymakers is what matters the most. The goal of the monetary policy rule should be to avoid distortions in the economy's capital structure, ensure that money has a neutral impact on prices and the allocation of credit, and not incent profligate fiscal policy. As will be highlighted in the review below, there are consistent economic growth differences between the periods when the Federal Reserve was guided by something resembling a

monetary policy rule and the periods when the Federal Reserve's actions were more accurately described as discretionary. The take-away from this historical review is that promoting sustainable and robust economic growth requires a rules-based monetary policy.

It is important to note upfront that the consequences from monetary policy, both good and bad, will not occur immediately. Typically, there is a time lag between the implementation of the policy and the resulting economic consequences, and that lag can be years in some instances. This reality complicates the historical review below because monetary policy's impact on the economy's structural growth path is usually ordained long before the economic consequences are visible.

Key economic turning points: 1958–2015

We identify the average growth rates across several economic measures, each of which provides a slightly different perspective on the health of the U.S. economy, to determine the timing of key economic turning points, or *pivots*. The pivots mark the beginning of sub periods over the 1958 to 2015 timeframe that are defined by meaningfully different underlying growth rates.

We begin the analysis with the second quarter of 1958, which is the beginning of the recovery from the recession that began in the third quarter of 1957, or what is referred to as the trough of the business cycle that peaked after the post-WWII growth cycle. Table 1 summarizes the average performance of these key variables since the second quarter of 1958 through the third quarter of 2016.

TABLE 1
Average Annual Percentage Change in Key Economic Measures
1958 through 2016

	AVERAGE ANNUALIZED QUARTERLY GROWTH 1958Q2 THROUGH 2016Q3				AVERAGE ANNUAL GROWTH 1958 THROUGH 2015		
	Real GDP	Real GDP per Worker	Change in Labor Productivity	Change in Real Net Worth U.S. Households*	Real Private Income Received	Real Private Income Received per Worker	Median Real Family Income
Whole period	3.13%	1.30%	2.17%	3.52%	2.98%	1.17%	1.17%

* Data as of 2016 Q2
Source: Author calculations based on data from the Bureau of Economic Analysis NIPA Accounts, Bureau of Labor Statistics, and Federal Reserve Flow of Funds Accounts

Since the 1958 recovery began:

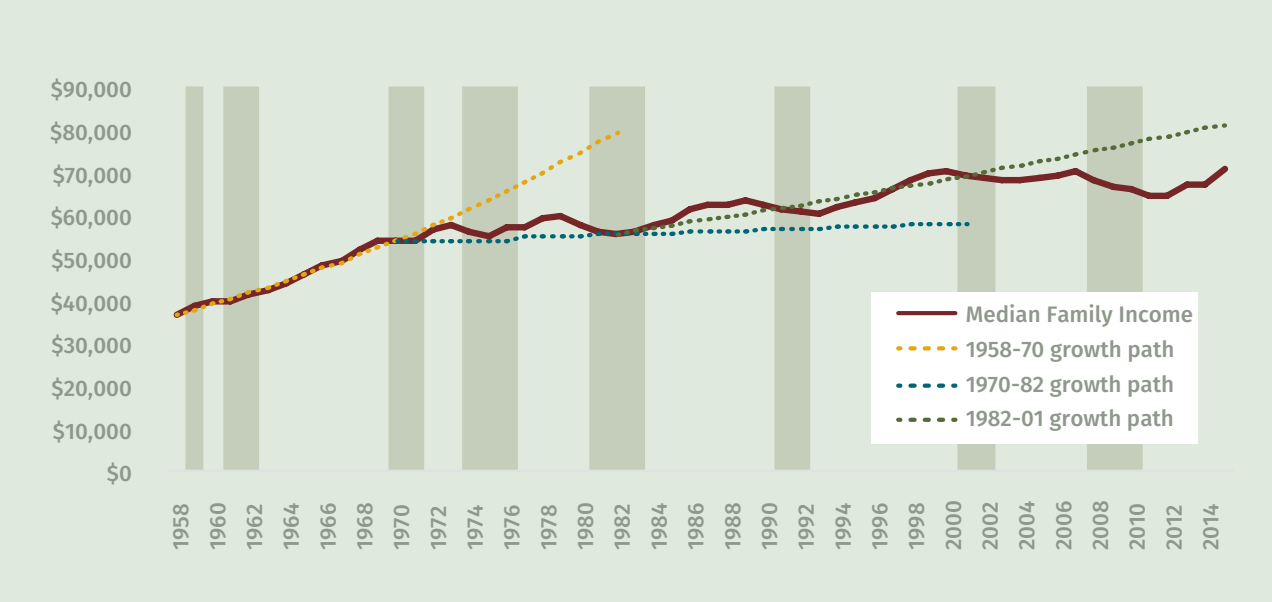
- Average annualized growth in quarterly gross domestic product (GDP) adjusted for inflation was 3.13 percent per year;
- Average annualized growth in quarterly gross domestic product (GDP) per worker adjusted for inflation was 1.30 percent per year;

- Average annualized growth in labor productivity grew 2.17 percent per year;
- Average annualized growth in the quarterly net worth of U.S. households was 3.52 percent per year;
- Average annual growth in the income received by the private sector, net of taxes, grew 2.98 percent per year;
- Average annual growth in the income received by the private sector, net of taxes, per private sector worker grew 1.17 percent per year; and,
- Average annual growth in median family income was 1.17 percent per year.

In order to define the sub-periods, it was important to document prolonged deviations (both positive and negative) from these average growth rates. The variances in the growth rates of the key economic measures identified three distinct pivots during the extended period from 1958 through 2015. The pivots were determined to have occurred around 1970, 1982, and 2001. The pivots were timed to be associated with troughs in the business cycle (represented by gray bars) to account for these cyclical impacts.[28]

The growth trends in the median family income exemplify the substantial growth deviations that occurred during the 1958 through 2015 time-period. Figure 3 presents the annual median family income, adjusted for inflation, over this time period. The dotted lines in Figure 3 represent the average trend growth path during each sub-period (excluding the period 2001-2015), and are projected into the next sub-period to illustrate the consequence in either lost growth potential or increased growth opportunities. The gaps (both positive and negative) exemplify the very different growth paths of median family income during each one of the identified sub-periods.

FIGURE 3. Median Family Income
1958 – 2015
(in $ 2009)



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

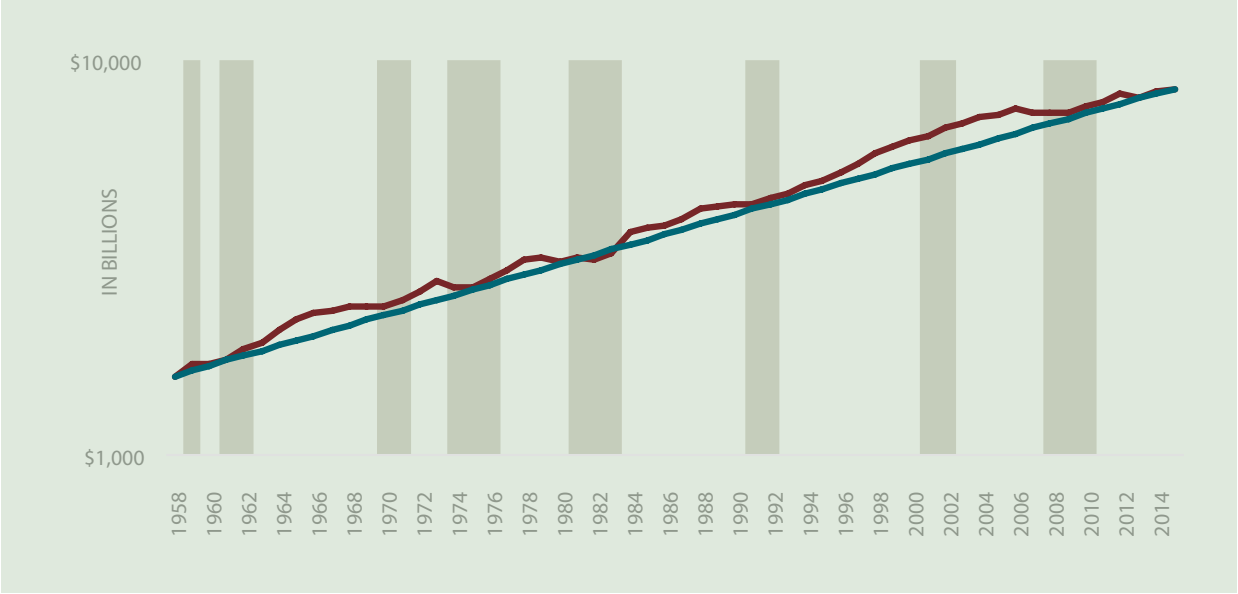
Between 1958 and 1970, actual inflation adjusted median family income (the red line in Figure 3) grew 3.3 percent per year, nearly three times the average growth rate of 1.2 percent throughout the entire period. Starting with the recession of 1970 a new growth trend was evident. Between 1970 and 1982, trend growth in inflation adjusted median family income came to a near standstill – growing 0.2 percent per year on average. The difference between represents a continuation of the 1958-70 growth path and the red line (the actual growth path) illustrates the large economic consequences from this slowdown in median family income growth.

Following the recession of 1982, median family income growth accelerated once again, even after accounting for the steep drop in median household income before and after the recession of 1991. On average, median household income grew 1.2 percent per year during this period. As a result, by 2001 actual median family income significantly exceeded the median family income that would have prevailed had the acceleration from the 1970-82 growth rate not occurred (see the difference between the solid line and the blue dotted line in Figure 3).

Since the recession of 2001, median household income stagnated once again growing a mere 0.2 percent a year. The cost of this slowdown relative to the previous growth path can be visualized by comparing the gap between the green dotted line to the red solid line in Figure 3.

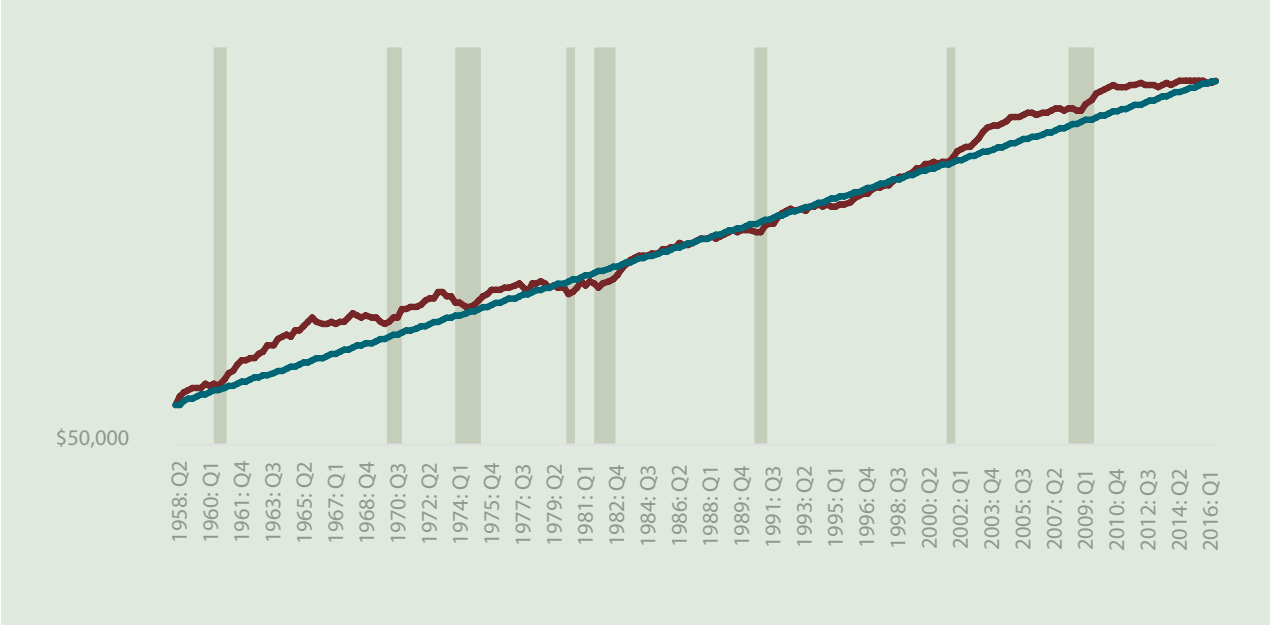
These divergent growth paths illustrate that there were significant growth discrepancies across different time periods. Similar patterns are also evident with respect to total private income received (after-taxes) (see Figure 4) and output (GDP) per worker (see Figure 5).

FIGURE 4. Private Income Received (after-taxes)
1958 through 2015



Source: Author calculations based on data from the U.S. Bureau of Economic Analysis, NIPA Accounts

FIGURE 5. Gross Domestic Product per Worker
1958 Q2 through 2016 Q3
(in $ 2009)



Source: Author calculations based on data from the U.S. Bureau of Economic Analysis, NIPA Accounts

While Figures 3 through 5 present the pattern with respect to median household income, private income received, and GDP per worker, this consistent trend is also evident with respect to the other economic data presented in Table 1. However, the timing of the change will vary slightly between metrics. The different growth patterns for the four-identified growth sub-periods are presented in Table 2. The commonality of changes in direction of these measures provides confidence in dating these sub-periods.

TABLE 2. Average Annual Percentage Change in Key Economic Measures
1958 through 2016 and Key Sub-periods

	Average annualized quarterly change in real GDP	Average annualized quarterly change in real GDP / worker	Change in Labor Productivity	Change in Net Worth U.S. Households
Whole period	3.1%	1.3%	2.2%	3.5%
1958 Q2 – 1970 Q4	4.5%	1.7%	3.2%	3.7%
1970 Q4 – 1982 Q4	**3.0%**	**0.8%**	**1.8%**	**2.9%**
1982 Q4 – 2001 Q4	3.8%	1.6%	2.4%	4.7%
2001 Q4 – 2016 Q3	**2.1%**	**1.4%**	**1.8%**	**3.3%**

	Average annual change in private income received	Average annual change in private income received per worker	Change in Median real family income
Whole period	3.0%	1.2%	1.2%
1958 – 1970	3.4%	1.3%	3.3%
1970 – 1982	**2.3%**	**0.5%**	**0.2%**
1982 – 2001	3.9%	1.7%	1.2%
2001 – 2015	**2.0%**	**1.5%**	**0.2%**

Source: Author calculations based on data from the Bureau of Economic Analysis NIPA Accounts, Bureau of Labor Statistics, and Federal Reserve Flow of Funds Accounts

Consistent with our thesis regarding the impact of secular changes in the mix of government policy, it is notable that significant changes in the government's fiscal and monetary policies occurred around each of the defined pivots. Perhaps more important, the economic consequences from the changes in economic policies around each one of the key pivot points fit the pattern – when economic policies became more efficient, the economic growth patterns were stronger, and when economic policies became less efficient, the economic growth patterns were weaker.

A historical review

The preceding section identified four distinct growth periods between 1958 and the present. The distinct growth periods correspond to substantive differences in the economic policy mix – particularly fiscal and monetary policies.

Table 3 summarizes the core principles underlying a pro-growth policy mix based on the review above (for fiscal and monetary policy). It also includes the principles for regulatory and trade policy so as to complete the policy mix. Together the principles define the *pro-growth policy mix* leading to strong, broad-based, economic growth.

TABLE 3
Summary of the Policy Mix Principles Consistent with Periods of Stronger Economic Growth

	Principles of a Growth Enhancing Policy Mix
Fiscal Policy	
Spending	Each government expenditure program should meet a rigorous net value standard. Total government expenditures (federal, state, & local) should not exceed the growth maximizing government burden. Discretionary government expenditures should not try to stimulate the economy during economic recessions.
Taxes	The total tax burden should be established to meet the required expenditure burden. The tax system should levy the lowest possible marginal tax rate in the least costly manner.
Monetary Policy[29]	Monetary policy should be constrained by a policy rule. The primary goal of monetary policy should be to ensure monetary neutrality and stability.
Regulatory Policy	Regulatory actions should be based on a rigorous cost-benefit standard. Regulations should be no more complicated than necessary. Actual, or de-facto, control of industries should be avoided.
Trade Policy	There should be minimal (ideally no) tariffs or other obstructions to trade across international borders, except for national security exceptions.

The principles outlined in Table 3 assign a unique function to each policy area. These roles are:

- Fiscal policy should provide beneficial public goods and services at the lowest cost to the economy and taxpayer;
- Monetary policy should enable a stable pricing framework and banking system;
- Regulatory policy should establish effective rules that enhance the market's efficiency and safeguards people and the environment in the least costly manner possible; and,
- Trade policy expands the benefits created by free markets across the domestic border.

The purpose of the Historical Review section is to illustrate that the fiscal, monetary, and regulatory policy mix during the periods with relatively more robust economic growth (1958 Q2 through 1970 Q4, and 1982 Q4 through 2001 Q4) more closely resembled the pro-growth policy mix highlighted in Table 3. Conversely, the fiscal and monetary policies during the periods with relatively less robust economic growth (1970 Q4 through 1982 Q4, and 2001 Q4 through today) less closely resembled those principles. Through this historical review we map the consistent relationship between the chosen economic policy mix and the resulting structural economic growth path.

The fiscal, monetary, and regulatory policy mix during the periods with relatively more robust economic growth more closely resembled the pro-growth policy mix highlighted.

It is important to note that, due to space limitations, the historical review focuses on the consistent relationship between the fiscal and monetary policy stances (and to a lesser extent regulatory policy), and the resulting economic outcomes. This focus should not be interpreted to mean that other factors are not important. Certainly, many other factors such as demographic issues (e.g. baby boomers entering the workforce), geo-political issues (e.g. unrest in the Middle East), and technological changes (e.g. the information technology revolution) matter as well. Trade policies, while meaningful, are also ignored due to space limitations.

Readers should note that the reviews presented below highlight the key takeaways from a more in-depth analysis provided in the Addendum to this paper, to which readers interested in these details can refer.

The Go-Go 1960s

As established above, the 1960s, particularly until 1966, were a very prosperous time. Compared to the average growth rate between 1959 and 2015:

- Average annualized growth in real GDP per worker was 28 percent higher;
- Average annual growth in private income received was 42 percent higher;
- Average annual growth in real family income was 180 percent higher;
- Average annualized growth in household's net worth was 5 percent higher; and,
- Economy-wide return on assets was 9 percent through 1966 (8.7 percent through 1970) compared to a 6.4 percent growth rate for the entire period.

The economic policy mix of the 1960s compared favorably to the principles described in Table 3, see Table 4. Overall, the policy mix consisted of:

- A stable monetary framework;
- Relatively less burdensome federal, state, and local government expenditures that were consistently below the average expenditure burden for the entire 1959 through 2015 period;[30]
- A spending composition that was skewed toward public goods and services rather than transfer payments;
- A relatively competitive effective marginal tax rate, despite the exceptionally high top statutory marginal tax rate; and,
- A relatively smaller overall regulatory burden.

The combination of the pro-growth fiscal, monetary and regulatory policies through 1965 greatly facilitated the above average economic growth performance of this period that exceeded the average economic growth rates in most periods that followed.

While the policy environment compared favorably to the policy mix principles overall, there was a noticeable change in the policy mix starting in the mid-1960s, soon after President Kennedy's tax cuts were finally passed. The lost fiscal discipline was epitomized by the growing expenditures devoted toward both the Great Society programs and the Vietnam War. When coupled with the overriding, but incorrect, belief that monetary policy should be subservient to fiscal policy, these expenditures contributed to the derailment of the stable monetary policy environment, setting the stage for the economic stagnation of the 1970s.

TABLE 4
Summary of the Policy Mix Between 1959 and 1970

	POLICY MIX: 1959 - 1970
FISCAL POLICY	
Spending	**Negatives** Spending started growing in 1966, reaching 42.5% of private income in 1970. **Positives** Relatively low expenditure burden (around 35% of private income between 1959 and 1965) that was closest to the growth maximizing burden compared to all other periods. Government expenditures were dedicated toward public goods and services rather than transfer payments or past interest costs – higher net present value projects.
Taxes	**Negatives** Statutory top marginal tax rate high (91% reduced to 70%) **Positives** Effective marginal tax rates were competitive for all income groups due to numerous tax credits and allowances (average top rate in 1960 was estimated to be 31%) Through 1966, tax and deficit burdens were below average
Monetary Policy	**Negatives** Belief that monetary policy should "accommodate the needs of fiscal policy" sowed the seeds of the 1970s inflation. **Positives** Through 1965, supported by relatively low government deficits, monetary growth supported low inflation and stable interest rates.
Regulatory Policy	**Positives** Compared to later years, significantly lower regulatory burden.

The Stagnant 1970s

The economy from 1970 through 1982 was volatile and plagued by surges of inflation. While overall inflation adjusted GDP growth was only slightly less than the entire 1959 through 2015 period (3.0 percent compared to 3.1 percent), this growth was driven by positive demographics (such as the baby boomers' entry into the workforce, amplified by the continued entrance of women). Growth across most other economic metrics were disappointing at best including:

- Average annualized growth in real GDP per worker that was 36 percent lower;
- Average annual growth in private income received that was 24 percent lower;
- Average annual growth in real family income that was 80 percent lower;
- Average annualized growth in household's net worth was 18 percent lower; and,

- Economy-wide return on assets was 5.9 percent from 1970 through 1982 compared to a 6.4 percent growth rate for the entire period; the declining asset efficiency was exemplified by the skewing of the asset base away from financial assets toward tangible assets due to the pernicious effects of inflation.

The economic policy mix of the 1970s compared unfavorably to the principles described in Table 3, see Table 5. A driving factor of the worsening policy mix was the inflationary monetary policy that directly harmed economic growth and weakened other policy areas (including fiscal policy and regulatory policy) that compounded the economic problems.

Rising inflation directly harmed economic growth by increasing the costs of inputs to production, increasing the costs from engaging in market activities (e.g. increasing transactions costs), destabilizing the lending markets, and skewing the asset base toward a composition that, while economically less productive, was optimal given the high and variable inflationary environment.

The rising inflationary pressures helped destabilize fiscal policy by pushing taxpayers into higher marginal tax brackets despite not earning a higher income adjusted for inflation. Continued growth in government expenditures relative to taxpayers' ability to afford these costs also worsened fiscal policy. Higher inflationary pressures also worsened regulatory policy, such as through the ill-conceived wage and price control policies that were implemented in an attempt to control the rising inflationary pressures.

TABLE 5
Summary of the Policy Mix Between 1970 and 1982

	POLICY MIX: 1970 - 1982
FISCAL POLICY	
Spending	Negatives Overall expenditure burden remained elevated compared to the 1960s. Skewing of government expenditures away from public goods and services toward transfer payments accelerated during the 1970s irrespective of the business cycle.
Taxes	Negatives Rising inflation, coupled with lack of indexing of tax brackets, led to rising marginal tax rates across many income groups
Monetary Policy	Negatives The end of the Bretton Woods monetary system led to activist monetary policy based on discretion of policymakers. Unstable Fed policy caused surges of inflation that were "unprecedented" during peacetime. Unstable Fed policy also helped create a volatile economic environment. Unstable monetary environment distorted the capital structure causing a less efficient asset base.
Regulatory Policy	Negatives Implementation of wage and price controls, in response to rising inflation, caused economic rigidity worsening overall economic vibrancy.

The 1980s through 2001 – prosperity returns

In contrast to the 1970s, prosperity flourished during the sub-period between the fourth quarter of 1982 and the fourth quarter of 2001, including:

- The average annual growth rate in inflation-adjusted total output produced by workers nearly regained its robust pace of the 1960s experiencing a 21 percent growth premium;
- The average annual growth rate in inflation-adjusted total income received grew faster than any other sub-period experiencing a 31 percent growth premium;
- Following the general decline between 1970 and 1982, economy-wide return on assets generally grew between 1982 and 2001; and,
- The average annual growth rate in inflation-adjusted household net worth also grew faster than any other sub-period experiencing a 35 percent growth premium.

Not all of the macroeconomic data during the 1980s and 1990s outperformed the average growth rate over the entire period. Specifically, average family incomes only grew about as fast as average during this sub-period, albeit significantly faster than the 1970s. The economic policy mix of the 1980s and 1990s, unlike the policy mix of the 1970s, compared favorably to the principles described in Table 3, see Table 6. Overall, the policy mix consisted of:

In contrast to the 1970s, prosperity flourished during the sub-period between the fourth quarter of 1982 and the fourth quarter of 2001.

- A return to a rules-based stable monetary framework;
- Significant reductions in the effective marginal tax rate;
- Reductions in tax complexity; and,
- Reductions in the overly costly regulatory burden.

TABLE 6
Summary of the Policy Mix Between 1982 and 2001

	POLICY MIX: 1982 - 2001
Fiscal Policy	
Spending	**Negatives** Total government expenditures as a percentage of private income remained above the average burden (43.3 percent) until mid-1990s. **Positives** Trend of declining expenditure burden accelerated in 1995, fell below period average in 1997, and hit a 33 year low in 2000.
Taxes	**Positives** Marginal tax rates were reduced across for all income classes. The tax code was simplified.
Monetary Policy	**Positives** Restrictive monetary policy of early 1980s helped conquer inflation. Monetary policy followed a predictable policy rule for most of the period.
Regulatory Policy	**Positives** Deregulation, which began in the late 1970s, helped improve productivity and business efficiency across a diverse number of industries. **Negatives** Increases in regulations resumed once again beginning in the early 1990s.

Despite these improvements in the overall policy mix compared to the 1970s, troubling aspects to the policy mix remained with respect to spending. While spending restraint relative to private income emerged during the mid- to late-1990s, the expenditure burden remained elevated throughout much of the period. Additionally, the composition of spending continued to skew away from public goods and services toward transfer payments during this period as well. Another troubling aspect to the policy mix, which would impact the economy during the 2000s, was an increase in regulations, and the manner in which regulations were enforced.

Despite these weaknesses, taken as a whole, the fiscal, monetary, and regulatory policy mix through most of the 1980s and 1990s was a significant improvement over the policy mix during the 1970s, which facilitated the above average economic growth performance of this period.

A depressed beginning to the 21st Century

While the economy of the 1980s and 1990s benefited from a policy mix of falling taxes, falling spending (eventually), improving monetary stability, and declining regulatory burdens, since the beginning of the 21st century, these trends have slowly reversed themselves, see Table 7.

TABLE 7
Summary of the Policy Mix Between 2001 and 2016

	POLICY MIX: 2001 - 2016
Fiscal Policy	
Spending	**Negatives** Growth in government expenditures relative to the private sector resumed an upward trajectory and has exceeded the average burden since 2003. Skewing of government expenditures away from public goods and services toward transfer payments resumed.
Taxes	**Negatives** In each year, either the tax burden, the deficit burden, or both was above the historical average. Relative competitiveness of U.S. corporate income tax code declined.
Monetary Policy	**Negatives** Beginning around 2003, monetary policy became less consistent with a policy rule. The less disciplined monetary policy had destabilizing impacts on asset markets and asset allocations.
Regulatory Policy	**Negatives** Growing regulatory burden increased rigidity and higher business costs. Incentives created by regulations, particularly lending in the housing markets, played a critical role in fueling the housing bubble and bust.

The lack of a formal policy rule to guide monetary policy, for instance, led to an overly-expansive monetary policy between 2003 and 2005 following the crash of the tech bubble and 9-11. The expansionist monetary policy, when coupled with the stricter application of the Community Reinvestment Act and financial innovations, fueled the housing bubble and the lost economic opportunities due to a misallocation of capital. The resulting housing bust led monetary policy further astray from a defined policy rule, and played an important role in both the resulting financial crisis and prolonged sub-par economic growth.

Fiscal policy slowly strayed away from the sounder policy during the 1980s through 1990s as well. In part, the less competitive U.S. fiscal policy was due to the significant reductions in the corporate income tax that were made in other industrialized countries including Canada, Germany, and the United Kingdom. Additionally, the U.S. tax system continues to use a global tax basis for its corporate income tax system, which is unique among the major industrialized countries. As a consequence, even without raising the corporate income tax, the relatively higher tax burden in the U.S. has been a drag on the U.S. economy.

On the spending side, fiscal discipline significantly lessened during the 2000s, particularly for transfer payments. More profligate spending caused the government expenditure burden to exceed the average burden throughout most of the 2000 – 2016 period, which was reflected in a rising average

tax burden and/or a rising burden from government deficits. However, the impact from the rising government expenditures is being masked by the Federal Reserve's efforts to maintain low interest rates, causing much of the debt burden to be temporarily shifted to savers through lower yields.

Of particular importance during this period, especially after 2009, was the rising regulatory burden. Beyond the previously mentioned stricter enforcement of the Community Reinvestment Act (starting in the late 1990s), new regulations such as Sarbanes-Oxley corporate governance regulations, the Affordable Care Act, and Dodd-Frank financial regulations, all increased the costs of doing business in the United States. Due to these higher costs of doing business, overall business growth slowed. While GDP per worker has grown 6 percent faster than the average over the whole period, this growth is due to weaker growth in overall employment. Additionally, across the other metrics evaluated earlier, the growth implications from the worsening policy mix have been negative:

- Private income received has experienced a growth deficit of 33 percent;
- Median family income has experienced a growth deficit of 84 percent;
- Household net worth has experienced a growth deficit of 5 percent; and,
- The average return on assets was flat and generally below the average return over the entire period.

Conclusion: Mapping the impact of policy changes to the resultant economic growth path

The consistent relationship between the policy environment and economic growth emerges because the manner in which all of the other factors of production are used depends upon the policy environment – whether those factors of production are the capital equipment (machines and durable goods), labor services (the people employed), technology (the knowhow), or entrepreneurship (the vision). The policy environment establishes the economic incentives, which are the driving force of the economy. An economy's underlying incentives determine how people and businesses will employ the factors of production.

The history of the past nearly 60-years is consistent with these insights, and the economy's underlying growth rate has varied predictably in response to changes in the policy environment. As discussed above, and the Addendum to this report provides a more detailed review, there has been a consistent pattern between the types of policies implemented by the government, and the pace of economic growth that results.

When economic policies create growth-enhancing incentives and enable prices to reflect scarcity and wants, the factors of production are used efficiently. During such periods, such as during the 1960s and the 1980s through the 1990s, economic growth is strong. Positive and stable economic incentives are fundamental to generating robust economic growth over the long-term. Put another way, economic growth flourishes when entrepreneurs are incented to take risks, create new goods and services, and/or invent new production techniques (e.g. they are using the factors of production efficiently).

When economic policies distort prices, decrease the incentives to take market risks, or increase the size and scope of government directed investments into politically favored sectors, the incentives to work, save, invest, or engage in entrepreneurial activities diminish (e.g. the factors of production are used inefficiently). Lower incentives to engage in productive activities create economic inefficiencies and during these periods, such as the 1970s or throughout the beginning of the 21st century, economic growth is weaker.

The consistent relationship between economic policies and underlying economic growth provides important perspectives on the current economic malaise. Since the turn of the 21st century, economic policies have veered away from the pro-growth principles and are, consequently, inhibiting economic growth. Because these anti-growth policies have been implemented for a long time, it appears that a *new normal* of sub-optimal economic growth has taken hold. This new normal is nothing new, however. It is simply the expected economic results from a less efficient policy environment.

Currently, misguided monetary policy is constraining growth through two separate, but reinforcing, mechanisms. First, it is distorting the capital allocation process in the U.S., thus creating longer-term structural economic dislocations; and second, it is enabling the continued promulgation of poor fiscal policies. Misguided fiscal and regulatory policies are constraining growth by: increasing the costs of doing business; reducing the after-tax return from productive activities; and, due to the inefficient size and composition of government expenditures, diverting an excessive amount of resources from more productive uses in the private sector to less productive uses in the government sector.

The implication from this review is straightforward: economic growth can exceed the average 2 percent economic growth performance of the 21st Century. What is needed is the right policy environment to foster that growth. This optimistic outlook contrasts with the secular stagnation theories and suggests there is a defined pathway to regaining a more robust economic future. But, we need the right policy reforms to obtain it.

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28 To account for the impact of the business cycle, comparisons typically examine the data based on either a peak-to-peak or trough-to-trough basis.

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