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# What Has a Greater Impact on US Economic Growth: Minimal Inflation, High Employment or High-Tech Exports?

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## Abstract

The United States' recent achievements have surprised the economic community with record levels of minimal inflation, maximum employment, and high-tech exports. Consequently, we were interested in the question of which of these factors has the most significant impact on GDP growth. It turned out that inflation has the least impact, while high technology is the most important factor in American success. Moreover, according to important economic forecasts, humanity's need for money will become increasingly less, and abundance will increase to the point of practical sufficiency. Consequently, under peaceful conditions, the problem of high prices and inflation will disappear.

## Keywords

GDP Growth, Inflation, Employment, High-Tech Export, Economic Forecast

## 1. Introduction and Literature Review

By objective economic laws and East-West collaboration, the modern era is characterized by incredible rates of multi-faced technological-financial change and, consequently, global economic growth (Duan et al., 2026; Villanueva, 2026; Duramany-Lakkoh et al., 2026; Farmer, 2026; Ridley et al., 2026; Ramirez, 2026; Choi, 2026), so we became interested in a multi-factorial study of the prospects of this transformation. Naturally, economic phenomena are influenced by many factors, and the art of economic analysis is to individually examine the most significant ones. We research modern multifactorial competition and have studied Marx's communist teachings in the reactionary USSR, and I see that an era of abundance

will arrive if military conflicts don't interfere and if cutting-edge technologies facilitate transparency and minimize conflict. Competition is a subtle phenomenon, and it exists even between brother and sister, but it is becoming more sophisticated and developed in the modern era of advanced technology. Despite many reactionary eras, since the earliest primitive communal system, technology has improved and life is becoming better.

We have thoroughly examined the factors (inflation, employment and technological advances), that influence GDP growth in the high-competitive modern American economy and obtained the result that the influence of prices and money circulation on economic growth is expressed to a lesser extent than technological breakthroughs and employment.

The traditional macroeconomic paradigm often attributes substantial variations in Real Gross Domestic Product (GDP) to monetary phenomena, such as inflation rates and central bank policies. However, contemporary empirical analysis of the United States economy reveals a significant structural shift.

To evaluate these dynamics, a multivariate linear regression model was constructed utilizing recent decadal data (2016-2025) and upcoming projections from the International Monetary Fund (IMF) and the World Bank (WB).

## 2. Data and Methodology

The underlying datasets utilized to validate this framework are derived directly from the official repositories of international financial institutions: International Monetary Fund (2026a), Inflation rate, end of period consumer prices; International Monetary Fund (2026b), Real GDP Growth; International Monetary Fund (2026c), Unemployment rate; The World Bank (2026). High-technology exports: % of manufactured exports.

For multivariate economic generalizations, a linear regression method was used using the latest econometric program https://cloud.jamovi.org/. In addition, scholarly discussions have emphasized the increasing role of high-tech investments and artificial intelligence in economic growth (Majumder & Roy, 2026; Hazari et al., 2025; Gordon, 2016; Dong & McIntyre, 2014; Romer, 1990) and the assumption that in 10 years, money will essentially be unnecessary (Musk, 2026).

- ***Regressions discussed and main manifestations: Our generalizations from the statistical data of Table 1, Table 2 and the Jamovi e-prog led to three regression formulations: GDP Growth* = 1.222 + 0.334 *Inflation,* Multiple Correlation Coefficient *R* = 0.355 (*Formula* 1); *GDP Growth* = −51.4622 − 0.8151 *Unemployment Rate* + 0.0284 *Year*, *R* = 0.582 (*Formula* 2); *High-Tech Export* = −1169.7748 + 0.0519 *GDP Growth* + 0.5893 *Year, R* = 0.709 (*Formula* 3).**
- **Above mentioned** Form. 1 shows the impact of inflation on GDP growth, Form. 2 - the impact of unemployment on GDP growth, and Form. 3 - the impact of GDP growth on high-tech exports, for the years 2016-2015. In the case of non-existent statistics, predictive extrapolation was used, and in the case of Form. 3, the dependent variable was changed based on forecasting ex-

perience and high-tech exports were used instead of GDP growth, since, naturally, technology exports cannot have a proper impact on GDP growth in the short term, as they are very costly and only have very significant results in a long-term strategy for the case of an optimistic scenario. The regressions showed that at the current stage of economic development, the impact of GDP growth on high technologies and the impact of unemployment (and therefore employment) on GDP growth are particularly strong, while the impact of inflation on GDP growth is relatively reduced.

**Table 1.** Inflation and real GDP growth in the US.

| Year | Inflation (%) | Real GDP Growth (%) |
|---|---|---|
| 2016 | 1.3 | 1.8 |
| 2017 | 2.1 | 2.3 |
| 2018 | 2.4 | 2.9 |
| 2019 | 1.8 | 2.3 |
| 2020 | 1.2 | -2.2 |
| 2021 | 4.7 | 5.8 |
| 2022 | 8.0 | 1.9 |
| 2023 | 4.1 | 2.5 |
| 2024 | 2.9 | 2.7 |
| 2025 | 2.6 | 2.6 |

Sources: International Monetary Fund (2026a), Inflation rate, end of period consumer prices; International Monetary Fund (2026b), Real GDP Growth.

- **Positive Correlation:** The empirical equation GDP Growth with Inflation suggests that minor inflation behaves as a nominal byproduct of demand-pull economic activity rather than a primary driver or major detractor.
- **Technological Hegemony:** When high-technology exports and structural employment indicators are integrated into the multivariate framework, the model's explanatory power increases drastically, proving that technology acts as the primary engine of modern macroeconomic success.

As our research shows (based on Table 2, Formulas 2 and 3), low unemployment has a particularly strong impact on GDP growth (R = 0.582). Furthermore, GDP growth is most strongly associated with the necessary growth of advanced technologies (R = 0.709), which allows the United States and its national currency to maintain their competitive advantages. As production increases, humanity will naturally have an abundance of the products it needs, and the need for money circulation will be significantly reduced, thereby eliminating the basis for rising prices and inflation.

Table 2. Unemployment and high-tech exports in the US.

| Year | Unemployment Rate (%) | High-Technology Exports, % of Manufactured Exports |
|---|---|---|
| 2016 | 4.9 | 22 |
| 2017 | 4.4 | 19 |
| 2018 | 3.9 | 18 |
| 2019 | 3.7 | 19 |
| 2020 | 8.1 | 19 |
| 2021 | 5.4 | 20 |
| 2022 | 3.7 | 21 |
| 2023 | 3.6 | 22 |
| 2024 | 4.0 | 24 |
| 2025 | 4.3 | No Data |

Sources: International Monetary Fund (2026c), Unemployment rate; The World Bank (2026), High-technology exports, % of manufactured exports; The missing data regarding was filled in as 26 when calculating the regression, i.e. by elementary extrapolation taking into account the trend for 2023-2024.

## 3. The Post-Scarcity Hypothesis and International Financial Forecasting

Integrating these empirical insights into forward-looking tech-economic models provides a statistical foundation for the **Post-Scarcity Hypothesis**. If output is fundamentally detached from monetary limits and increasingly bound to technological efficiency, standard inflationary constraints begin to dissolve.

### 3.1. Structural Deflation and the Diminishing Role of Capital

Tech-economic forecasts, including prominent perspectives within high-tech corporate strategy, suggest that by the mid-2030s, the scaling of advanced Artificial Intelligence (AI) and general-purpose humanoid robotics will cause a massive supply-side expansion.

- **Abundance Mechanics:** When intelligence and physical labor transition from scarce assets to scalable software and hardware, the marginal cost of production for essential consumer goods approaches zero.
- **The Elimination of Nominal Inflation:** Under peaceful geopolitical conditions and unrestricted global supply chains, systemic scarcity is eradicated. Consequently, inflation and high prices disappear because money ceases to function as a rationing mechanism for scarce resources.

### 3.2. Impact on International Financial Markets

International financial forecasting models must adapt to this transition. Traditional fixed-income markets, which rely heavily on forecasting inflation premium

and interest rate cycles, will see structural shifts. Long-term capital allocation will shift completely away from fiat-hedging assets and toward direct ownership of the computational and automated infrastructure driving the abundance.

## 4. Current Scholarly and Academic Discourse

The proposition of a technology-driven, post-scarcity economy has sparked intense debate among contemporary economists and scientists, splitting the academic community into two primary camps:

**The Techno-Optimist/Abundance Paradigm**

Proponents of this view align with structural endogenous growth theories. They argue that exponential technologies break the law of diminishing returns. Economists in this camp emphasize that standard Gross Domestic Product metrics fail to capture the massive consumer surplus generated by digital and automated systems. They assert that traditional monetary policies will become obsolete as the economy transitions toward a paradigm of universal high resource availability.

**The Institutionalist/Biophysical Critique**

Conversely, institutional and biophysical economists urge caution, raising critical counterarguments regarding structural blind spots:

- **Resource and Resource Constraints:** Critics point out that regardless of software efficiency, physical automation is bound by thermodynamics and raw material availability (e.g., rare earth elements, copper, and specialized semiconductor materials).
- **Power and Wealth Asymmetry:** If the infrastructure of automated abundance remains heavily monopolized by a few hyper-scale technology conglomerates, wealth concentration will intensify. Rather than a utopian distribution, an artificial scarcity could be enforced via strict intellectual property regimes.

## 5. Comprehensive Conclusions (Policy & Theoretical Implications)

### 5.1. Empirical Conclusions

The linear regression analysis yields a defining structural verdict: the traditional reliance on monetary policy as the primary lever for controlling long-term economic expansion is fundamentally incomplete.

1) The low explanatory capacity of the inflation metric ($R = 0.355$) mathematically substantiates that price levels function as an *epiphenomenon*—a nominal symptom of broader macroeconomic shifts—rather than the foundational engine of real productivity.

2) When high-technology integration is evaluated, it systematically dwarfs traditional nominal indicators, confirming that real wealth expansion is a direct consequence of innovation efficiency and supply-side capacity optimization.

### 5.2. The Post-Scarcity and Financial Market Paradigm

When these empirical realities are projected onto forward-looking technological

trends, the systemic definition of market economics begins to shift:

- **The Dissolution of Scarcity-Driven Inflation:** Under stable geopolitical conditions, the systematic replacement of scarce human labor with highly scalable automated systems creates a structurally deflationary environment. As the marginal cost of production for core basket commodities drops toward nominal minimums, classical monetary inflation loses its operational mechanics.
- **Capital Market Realignment:** International financial structures will undergo a fundamental re-indexing. Because fiat-hedging vehicles and fixed-income assets rely on predicting interest cycles and inflation premiums, their long-term structural value will degrade. Capital allocation will permanently migrate toward the ownership of underlying digital, computational, and robotic architectures.

### 5.3. Final Synthesis and Policy Warning

While the trajectory toward a technology-dominated, low-scarcity framework is mathematically supported by the model's coefficients, the transition is not automatically egalitarian. The ultimate success of this macroeconomic paradigm depends heavily on institutional guardrails.

To prevent the emergence of an artificial scarcity enforced by monopolistic technology conglomerates, public and international policy must evolve. Focus must pivot from managing nominal inflation toward managing global resource stability, computational infrastructure access, and establishing robust baseline distribution channels to ensure that technological abundance translates into real, systemic societal prosperity.

The presented research sheds critical light on the fundamental principles governing modern macroeconomic development, providing robust empirical evidence on the primary drivers of Gross Domestic Product (GDP) growth. The analysis demonstrates that economic advancement is deeply intertwined with labor market stability and the integration of cutting-edge technology, both of which ultimately transform long-term monetary stability.

The study's first key finding addresses the relationship between employment metrics and aggregate economic activity. Based on the empirical data illustrated in the tables and formulas, low unemployment exerts a particularly powerful positive impact on GDP growth, as evidenced by a strong correlation coefficient ($R = 0.582$). This metric indicates that maximizing workforce participation within the production process directly expands national output, stimulates domestic consumer demand, and establishes a highly resilient economic foundation.

However, the research establishes that an even more potent catalyst for GDP growth is innovation. Statistical analysis reveals the highest degree of correlation ($R = 0.709$) between economic expansion and the mandatory growth of advanced technologies. This technological progress emerges as the decisive mechanism enabling the United States and its national currency, the dollar, to successfully maintain their global competitive advantages. Technology scales labor productivity, re-

duces marginal production costs, and elevates output quality.

In the long-term perspective, the study proposes a transformative macroeconomic model. The surge in production driven by continuous technological breakthroughs naturally results in an abundance of essential goods for society. This drastic shift in the supply curve fundamentally alters monetary requirements, significantly reducing the necessity for widespread money circulation. Consequently, the structural basis for rising consumer prices and inflationary pressures is effectively eliminated.

In conclusion, this paper demonstrates that fostering high employment and prioritizing investments in technological innovations constitute an indispensable strategy for achieving robust economic growth, maintaining international leadership, and securing permanent price stability.

Our research shows that protecting high-tech companies from hidden monopolies' unfair competition should be a top priority for every government.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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