



## ZAIS Insights

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## The new investment cycle

### The new investment cycle

- Business investment has recovered quickly from the Corona-crisis
- Favorable financial conditions and structural changes could lift business investment further
- This would be good for productivity and economic growth
- The main risk is policy uncertainty

We have stated before that strong business investment will be a key feature of the new business cycle expansion.<sup>1</sup> Our positive outlook for business investment rests on four factors:

- First, we already see evidence of strong business investment.
- Second, financial conditions look to us to be favorable for business investment.
- Third, we believe structural changes related to the pandemic, climate change and other transformations will trigger more business investment.
- Fourth, we think corporations will place more value on real investments than on equity buy-backs.

If business investment will be strong, as it was in the 1960s, early 1970s and 1990s, then productivity should be strong, as well, lifting the economic growth potential. We

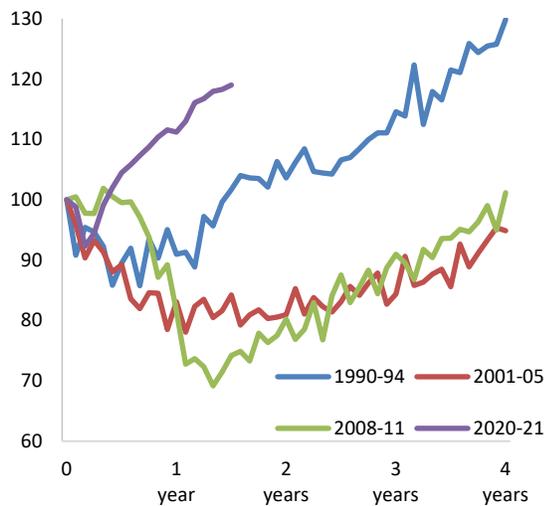
see the main risk for stronger business investment being uncertainty, especially from fiscal and monetary policy.

### The evidence so far

Compared to the previous two cycles, business investing fell less in the pandemic recession and recovered faster after the initial decline: core capital goods orders only dipped 10% at the start of the recession and in September this year were nearly 20% higher compared to the pre-Corona level, which is even stronger than the recovery of the early 1990s (see Chart 1).

**Chart 1: Core capital goods orders\***

Index, 100 = month before start of recession



Source: US Census Bureau <sup>2</sup>

\*Nondefense capital goods orders excluding aircraft in nominal terms

A look at the GDP figures for real business investment shows a more differentiated picture but with a similar message. Total real business investment fell around 10% during the recession and was up nearly 2% from the pre-Corona level in the third quarter of this year (see Table).

### Table: Real business investment

% change from last quarter before the recession to the fifth quarter after the recession

	1990-92	2001-03	2007-10	2020-21
Total	-1.5	-10.4	-10.9	+1.8
Structures	-18.1	-23.0	-31.6	-21.0
Equipment	+1.5	-10.2	-7.5	+5.2
Intellectual property	+12.4	0.0	+4.5	+12.7
<i>Total ex structures and Corona-hit sectors*</i>	+5.0	-4.1	-0.9	+13.5

Source: US Bureau of Economic Analysis<sup>3</sup>

\*Equipment and intellectual property excluding transportation and entertainment

Real business investment in structures, which is typically a laggard, is still weak similar to previous cycles. Investment in hospitality & leisure structures is particularly weak due to the Corona pandemic.<sup>4</sup> Also, investment in oil & gas structures is down following the plunge in oil prices last year and efforts to reduce CO<sup>2</sup> emissions.<sup>5</sup>

Real business investment in equipment and intellectual property products has performed much better than structures, especially excluding those sectors that were hit hardest by the Corona pandemic, namely transportation (aircraft) and entertainment (see Table, last row).

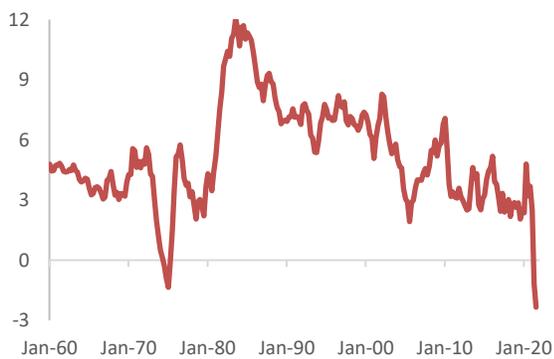
In our view, Corona forced many businesses to make special investments to adapt to the pandemic situation. However, we think this is not all that explains the strength of business investment, and expect that the investment upturn will continue.

## Favorable financial conditions

Important for business investment is the real cost of capital. Real corporate bond yields are currently negative due to higher inflation (see Chart 2). We think that real bond yields will rise as interest rates increase and inflation pressures ease next year, but will remain low by historical standards.

**Chart 2: Real corporate bond yield**

% p.a.



Source: Moody's and US Bureau of Economic Analysis<sup>6</sup>

Importantly, bond markets remain wide open to corporate borrowers and have the capacity to absorb more new bond issues.<sup>7</sup> Also, bank lending standards for commercial and industrial loans are on the lenient side of the historical range, according to the latest Senior Loan Officer Survey.<sup>8</sup>

**Chart 3: Tobin's Q for US corporates**

Ratio



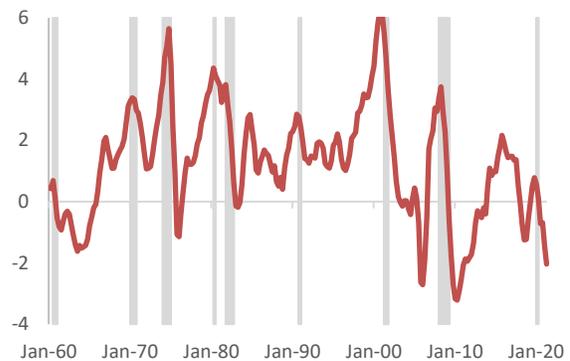
Source: Board of Governors of the Federal Reserve System<sup>9</sup>

One way of looking at the cost of capital from an equity perspective is the so-called Tobin's Q, which is the equity market value of the corporate capital stock versus its replacement costs. Currently, Tobin's Q is at an historical high (see Chart 3), which means that, for every \$1 of equity issued in the market, US corporates get nearly \$2 of intrinsic capital value.

The financial position of businesses themselves also appears favorable. Profits in the second quarter of this year were already 31% higher than the pre-Corona level, thanks in part to large government transfer payments.<sup>10</sup> Moreover, businesses have large internal funding resources as they currently save more than they invest (negative financing gap, see Chart 4).

**Chart 4: Financing gap for US corporates**

% of gross value added (negative = investment < savings)



Source: US Bureau of Economic Analysis<sup>11</sup>

Finally, the long period of low interest rates has also lowered the interest payment burden for businesses: last year, interest payments of US nonfinancial businesses were less than 20% of the EBITDA, compared to more than a third prior to the financial crisis.<sup>12</sup>

## Structural change as catalyst

Favorable financial conditions are an important pre-condition for business investment but not sufficient, alone. In the last cycle, financial conditions were also favorable, but business investment was tame.<sup>13</sup> We expect structural changes in six areas to accelerate business investment going forward.

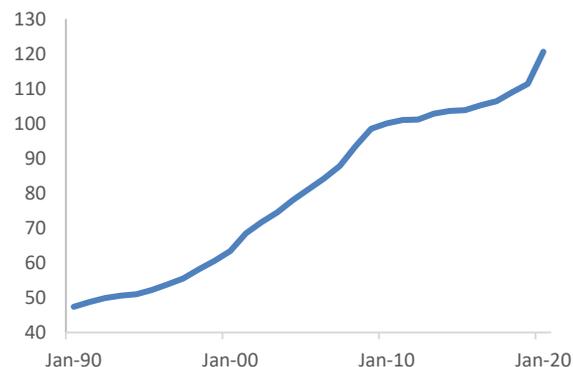
First, the Corona pandemic has increased the acceptance of technology in businesses and private households. We believe this will result in lasting shifts such as more working from home and the advance of the digital delivery economy. For businesses, that would mean more investment in technology, logistics and storage capacity.

Second, we think artificial intelligence will boost the advance of the digital economy. As a result, we believe businesses will have to invest more in information technologies to stay competitive and in touch with customers.

Third, we believe that tighter labor supply (demographics and people withdrawing from the labor force) will force businesses to deploy more capital. As a result, we expect the capital-to-labor ratio to rise faster after a decade of small increases (see Chart 5).

**Chart 5: Capital-labor ratio**

Index 2010=100



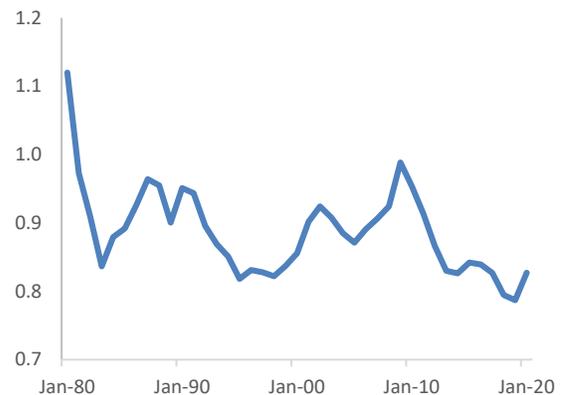
Source: US Bureau of Economic Analysis and US Bureau of Labor Statistics <sup>14</sup>

Fourth, in our view, globalization is unlikely to reverse, but the days of great efficiency gains and cost reductions from globalization are probably over. Thus, we think businesses will have to invest more at home to compensate for the diminishing marginal benefits from globalization.

Fifth, we are convinced businesses recognize the need to respond to climate change and related consumption patterns. In particular, we expect more business investment in the generation of alternative energy as well as power-saving technologies and structures.

Sixth, public infrastructure investment has been weak over the last decade (see Chart 6). We believe that the recently passed infrastructure bill will improve the investment environment for businesses and stimulate business investments, for example, in new transportation and energy technologies.

**Chart 6: Public infrastructure investment**  
% of GDP



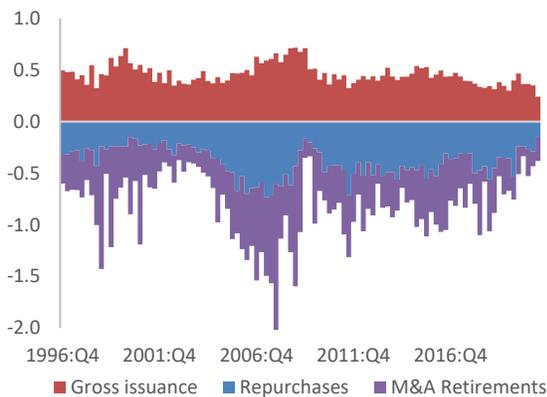
Source: US Bureau of Economic Analysis <sup>15</sup>

## Corporate behavior may change as well

Over the last two cycles, many corporations have tried to boost their enterprise value by returning cash to shareholders (stock repurchases and M&A retirements) rather than through real investments (see Chart 7).

**Chart 7: Equity issuance and retirement**

% of corporate equity outstanding



Source: Board of Governors of the Federal Reserve System <sup>16</sup>

So far, equity retirements still exceed gross issuance, but retirements have declined and we believe more and more corporations will see better value in real investments.

Splitting businesses into core activities like the recent instance announced by General Electric are good examples, in our view, of a changing corporate mindset that focusses more on investment in real activities and less on financial balance sheet management.

We believe these behavioral changes will also produce peer pressures and herding effects: as more businesses raise their real investments, others likely will be forced or encouraged to do so, as well.

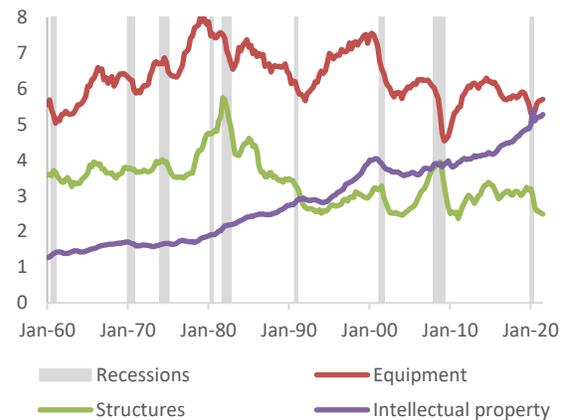
## Good for productivity and growth

Of the three major types of business investment (see Chart 8), we believe investment in intellectual property will

continue its secular rise at an accelerated pace. Investment in equipment has the most cyclical upside potential, in our view. Investment in structures, we think, will be more mixed, with logistics and storage investments likely to rise, while investment in office space will probably be more moderate.

**Chart 8: Business investment by type**

% of GDP

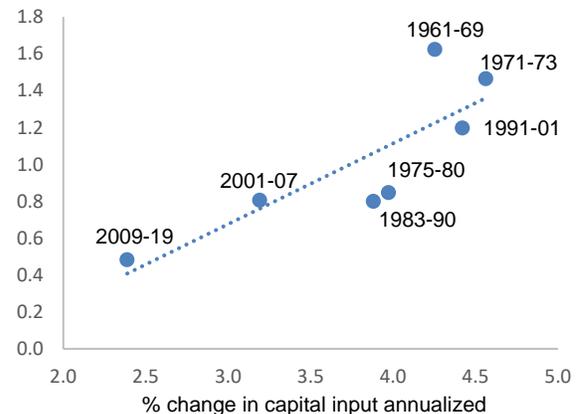


Source: US Bureau of Economic Analysis <sup>17</sup>

Chart 9 shows the relationship between capital input changes and total factor productivity growth over the last seven business cycle expansions.

**Chart 9: Total factor productivity growth\***

% change annualized



Source: Federal Reserve Bank of San-Francisco <sup>18</sup>

\*Utilization adjusted, during cyclical expansion periods

The last expansion had the lowest capital input changes and the lowest total factor productivity growth. In contrast, the expansions in the 1960s, early 1970s and 1990s had both higher capital input and total factor productivity growth.

We believe that the relationship will continue to hold and expect that higher investment will lead to higher total factor productivity growth, as well as higher economic growth potential.

### The risk of uncertainty and instability

While change is good for investment, uncertainty and instability are not. In our view, political and policy uncertainty and instability are the main risk factors for business investment. This starts with geopolitical tensions, especially between China and the US, and continues with the political divisions inside the US.

Structural transformations, like climate change policies, need to follow clear targets and avoid creating conflicting incentives. This is difficult in an environment of polarizing political and economic interests. It is also important to find the right balance between rules that enforce change and the reductions of bureaucratic hurdles.

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<sup>1</sup> See for example “*The Fed is debt constrained*”; ZAIS Insight, October 2021.

[https://www.zaisgroup.com/news/fed-debt/fed-is-debt-constrained-zais-insights.pdf?pdf=fed\\_debt](https://www.zaisgroup.com/news/fed-debt/fed-is-debt-constrained-zais-insights.pdf?pdf=fed_debt)

<sup>2</sup> U.S. Census Bureau, Manufacturers' New Orders: Nondefense Capital Goods Excluding Aircraft [NEWORDER], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/NEWORDER>

Most important, in our view, is that fiscal and monetary policy need to create an environment of macro-stability. The Federal Government and the Fed have responded to the Corona-Pandemic with very expansionary fiscal and monetary measures. This was appropriate to cushion the economic impact of the pandemic.

The infrastructure bill is important in our judgment, but otherwise the government needs to consolidate the budget to ensure debt sustainability. On monetary policy, we believe a large part of current inflation pressures is frictional (Corona-related distortions) but we also think that underlying inflation dynamics have changed and the Fed needs to respond to these changes.

Potential failures of fiscal and monetary policy to act in a timely and smooth fashion increase the risk of debt sustainability and inflation problems as well as panic reactions in the future. The result would be more economic uncertainty and instability, undermining the outlook for business investment.

### More information

As always, we are available to discuss our views with you. Please contact your Client Relations representative at +1 732 978 9722 or [zais.clientrelations@zaisgroup.com](mailto:zais.clientrelations@zaisgroup.com)

<sup>3</sup> U.S. Bureau of Economic Analysis, National Income and Product Accounts, October 28, 2021.

Table 5.3.3. Real Private Fixed Investment by Type, Quantity Indexes.

<https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>

Table 5.3.6. Real Private Fixed Investment by Type, Chained Dollars.

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<https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>

<sup>4</sup> U.S. Bureau of Economic Analysis, National Income and Product Accounts, October 28, 2021.

Table 5.3.6. Real Private Fixed Investment by Type, Chained Dollars. Mining exploration, shafts, and wells, row 8.

<https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>

<sup>5</sup> U.S. Bureau of Economic Analysis, National Income and Product Accounts, October 28, 2021.

Table 5.3.6. Real Private Fixed Investment by Type, Chained Dollars. Leisure and hospitality is included under “other structures”, row 8.

<https://apps.bea.gov/iTable/iTable.cfm?reqid=19&step=2#reqid=19&step=2&isuri=1&1921=survey>

<sup>6</sup> Moody's, Moody's Seasoned Baa Corporate Bond Yield [BAA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/BAA>

U.S. Bureau of Economic Analysis, Gross value added of nonfinancial corporate business [A455RC1Q027SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/A455RC1Q027SBEA>

U.S. Bureau of Economic Analysis, Real Gross value added of nonfinancial corporate business [B455RX1Q027SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/B455RX1Q027SBEA>

<sup>7</sup> US corporate bond issuance reached a record of 2282,3 billion USD in 2020, up 60.4% from 2019 and was 1714.9 billion USD YTD in October 2021.

US-Corporate-Bonds-Statistics-SIFMA, November 1, 2021.

<https://www.sifma.org/resources/research/us-corporate-bonds-statistics/us-corporate-bonds-statistics-sifma/>

<sup>8</sup> Board of Governors of the Federal Reserve System (US), Net Percentage of Domestic Banks Tightening Standards for Commercial and Industrial Loans to Large and Middle-Market Firms [DRTSCILM], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/DRTSCILM>

Board of Governors of the Federal Reserve System (US), Net Percentage of Domestic Banks Tightening Standards for Commercial and Industrial Loans to Small Firms [DRTSCIS], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/DRTSCIS>

<sup>9</sup> Board of Governors of the Federal Reserve System (US), Nonfinancial Corporate Business; Corporate Equities; Liability, Level [NCBEILQ027S], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/NCBEILQ027S>

Board of Governors of the Federal Reserve System (US), Nonfinancial Corporate Business; Net Worth, Level [TNWMVBSNNCB], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/TNWMVBSNNCB>

(Nonfinancial Corporate Business; Corporate Equities; Liability, Level/1000)/Nonfinancial Corporate Business; Net Worth, Level

<https://fred.stlouisfed.org/graph/?g=xtC>

<sup>10</sup> U.S. Bureau of Economic Analysis, Corporate profits with inventory valuation and capital consumption adjustments: Domestic industries: Nonfinancial [A463RC1Q027SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/A463RC1Q027SBEA>

<sup>11</sup> U.S. Bureau of Economic Analysis, Current-Cost Net Stock of Fixed Assets: Private: Nonresidential [K1NTOTL1ES000], retrieved from FRED, Federal Reserve Bank of St. Louis; November 16, 2021.

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<https://fred.stlouisfed.org/series/K1NTOTL1ES000>

U.S. Bureau of Economic Analysis, Gross private domestic investment: Fixed investment: Nonresidential (implicit price deflator) [A008RD3Q086SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 16, 2021.

<https://fred.stlouisfed.org/series/A008RD3Q086SBEA>

U.S. Bureau of Labor Statistics, All Employees, Total Private [USPRIV], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/USPRIV>

<sup>12</sup> Board of Governors of the Federal Reserve System; Financial Accounts of the United States - Z.1

S.4.a Nonfinancial Noncorporate Business

<https://www.federalreserve.gov/releases/z1/20210923/html/s4a.htm>

S.5.a Nonfinancial Corporate Business

<https://www.federalreserve.gov/releases/z1/20210923/html/s5a.htm>

<sup>13</sup> Real corporate bond yields were on the low side of the historical range between 2010 and 2019 (see Chart 2) and Tobin's Q was well above 1 (see Chart 3). At the same time, business investment in equipment and structures was on the low side of the historical range (see Table on page 1 and Chart 8 on page 4).

<sup>14</sup> U.S. Bureau of Economic Analysis, Current-Cost Net Stock of Fixed Assets: Private: Nonresidential [K1NTOTL1ES000], retrieved from FRED, Federal Reserve Bank of St. Louis; November 16, 2021.

<https://fred.stlouisfed.org/series/K1NTOTL1ES000>

U.S. Bureau of Economic Analysis, Gross private domestic investment: Fixed investment: Nonresidential (implicit price deflator) [A008RD3Q086SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 16, 2021.

<https://fred.stlouisfed.org/series/A008RD3Q086SBEA>

U.S. Bureau of Labor Statistics, All Employees, Total Private [USPRIV], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/USPRIV>

<sup>15</sup> U.S. Bureau of Economic Analysis, National Income and Product Accounts, October 28, 2021.

Table 7.5. Investment in Government Fixed Assets.

<https://apps.bea.gov/iTable/iTable.cfm?ReqID=10&step=2>

U.S. Bureau of Economic Analysis, Gross Domestic Product [GDPA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/GDPA>

<sup>16</sup> Board of Governors of the Federal Reserve System (US), Equity Issuance and Retirement; October 1, 2021.

<https://www.federalreserve.gov/releases/efa/efa-project-equity-issuance-retirement.htm>

Board of Governors of the Federal Reserve System (US), Nonfinancial Corporate Business; Corporate Equities; Liability, Level [NCBEILQ027S], retrieved from FRED, Federal Reserve Bank of St. Louis; November 15, 2021.

<https://fred.stlouisfed.org/series/NCBEILQ027S>

<sup>17</sup> U.S. Bureau of Economic Analysis, Gross Private Domestic Investment: Fixed Investment: Nonresidential: Intellectual Property Products [Y001RC1Q027SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 16, 2021.

<https://fred.stlouisfed.org/series/Y001RC1Q027SBEA>

U.S. Bureau of Economic Analysis, Gross Private Domestic Investment: Fixed Investment: Nonresidential: Equipment [Y033RC1Q027SBEA], retrieved from FRED, Federal Reserve Bank of St. Louis; November 16, 2021.

<https://fred.stlouisfed.org/series/Y033RC1Q027SBEA>

U.S. Bureau of Economic Analysis, Private fixed investment: Nonresidential: Structures [B009RC1Q027SBEA], retrieved from FRED,

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Federal Reserve Bank of St. Louis; November 16, 2021.

<https://fred.stlouisfed.org/series/B009RC1Q027>  
[SBEA](#)

U.S. Bureau of Economic Analysis, Gross Domestic Product [GDP], retrieved from FRED, Federal Reserve Bank of St. Louis; November 16, 2021.

<https://fred.stlouisfed.org/series/GDP>

<sup>18</sup> John G. Fernald, "A Quarterly, Utilization-Adjusted Series on Total Factor Productivity." FRBSF Working Paper 2012-19 (updated March 2014). Produced on September 03, 2021 8:44 AM by John Fernald/Neil Gerstein-- fernaldjg@gmail.com (Directory: out\QuarterlyTFP\_2021.09.03)

<https://www.frbsf.org/economic-research/publications/working-papers/2012/19/>

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