



November BEA Advisory Committee Meeting

Diane Swonk

Chief Economist, KPMG

November 8, 2024

Underestimating investment in technology and productivity growth

- **“Enterprise information and communications technology software pricing and developer productivity measurement”** by Martin Fleming
 - **Big changes in information and communication technology (ICT) since 2000**
 - **Price indices should shift to measure a bundle of capital services prices**
 - **2015-2021: current NIPA methodology for ICT found an average annual decline of -2%; this paper’s new estimate found -6.4% (an additional decline of 4.4 percentage points)**
 - **→ this means that investment spending, productivity growth and real GDP growth have been underestimated**
 - **GDP growth: 0.1 percentage point underestimate**
- **Integrate BEA data with IDC data (been around for 60 years)**

Other issues

- **GenAI adoption by businesses**
 - **Variation by industry**
 - **Pulse survey likely underestimating**
 - **Relationship between investment and productivity**
- **GenAI requirements for energy grids**
 - **Stressing existing grids at same time as extreme weather events increasing in intensity and impacting grids**
 - **Growth in data centers**
 - **Geographically dispersed (e.g., northern Virginia and northern California)**

Thank you

For more information, please see the KPMG Economics Web

[KPMG Economics \(kpmgus\)](http://kpmgeconomics.com)



Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.



kpmg.com/socialmedia

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

© 2024 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.