

We Need More GDP... But Can We Get It?

November 2016

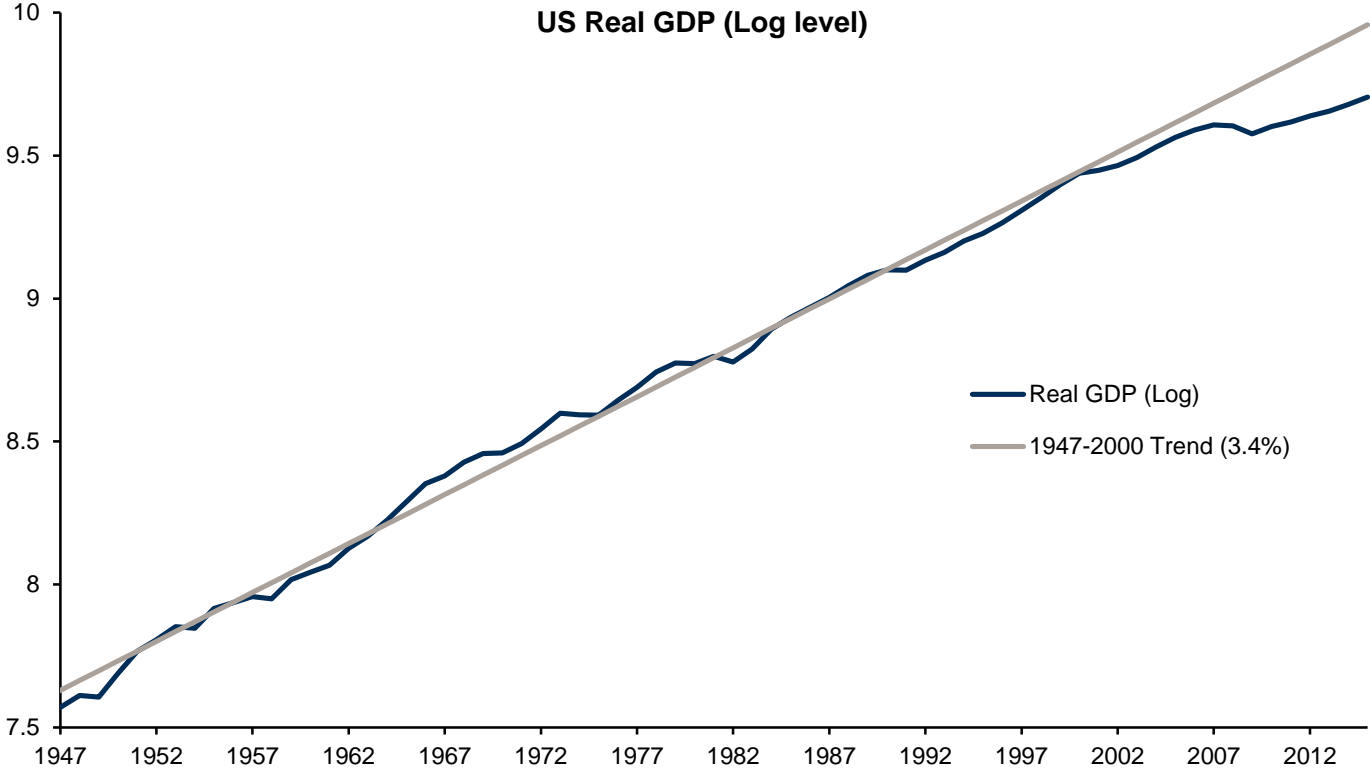
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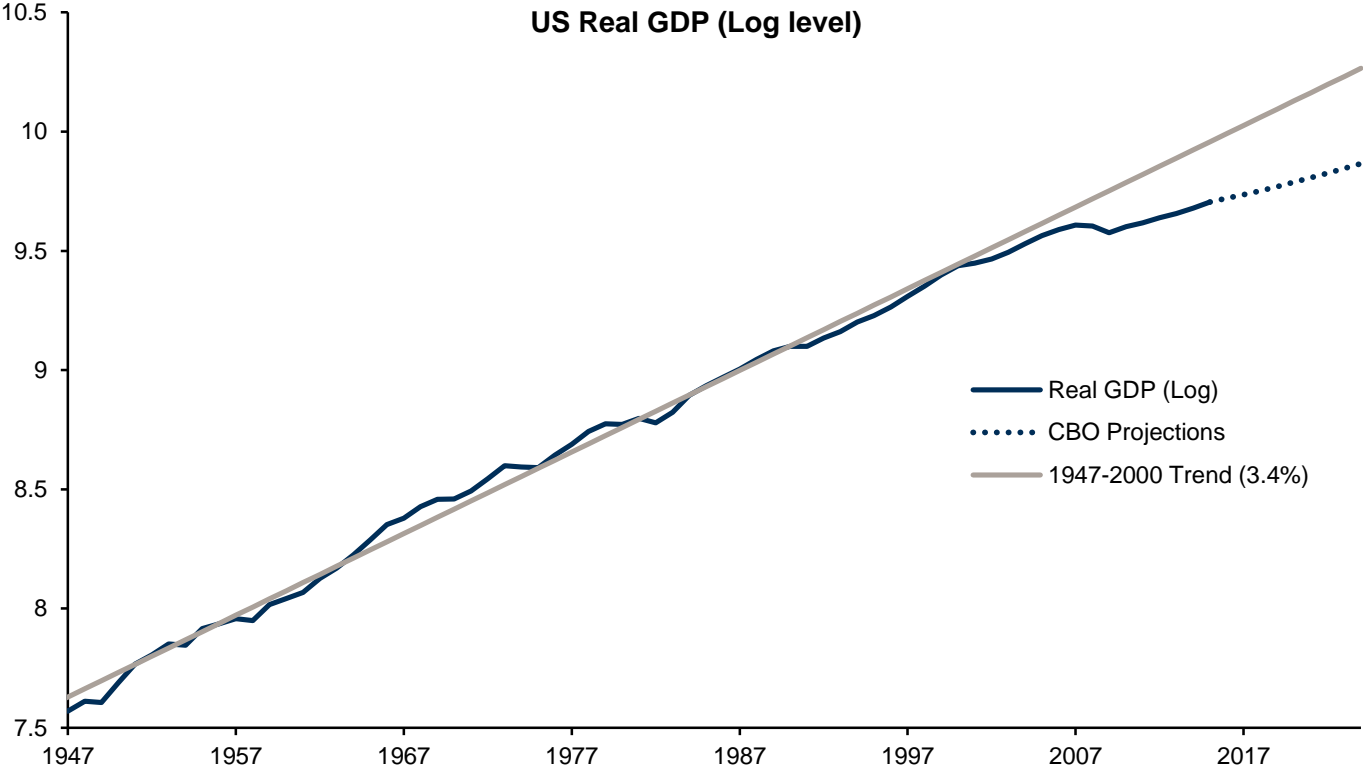
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Trends in US Real GDP I



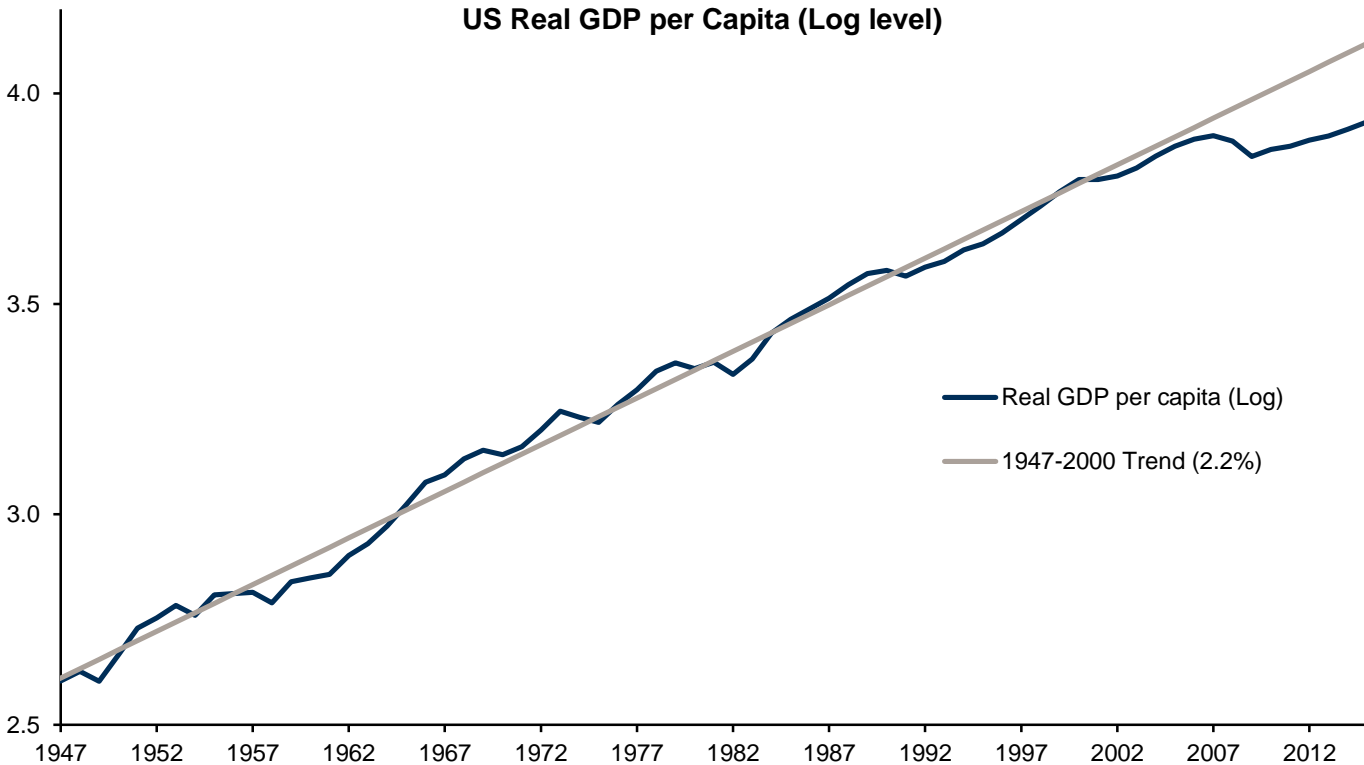
Source: Haver Analytics®, Credit Suisse

Trends in US Real GDP II



Source: Haver Analytics®, Credit Suisse

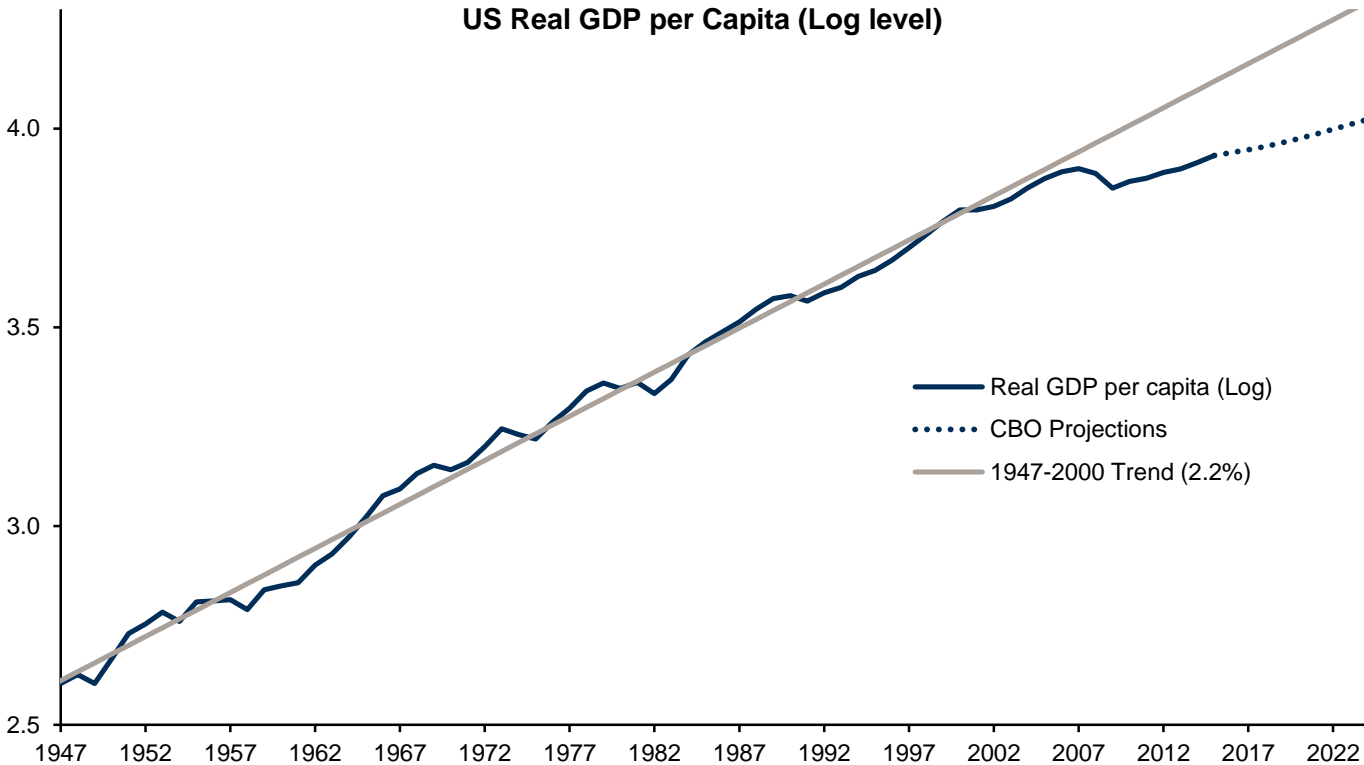
Trends in US Real GDP III



Source: Haver Analytics®, Credit Suisse



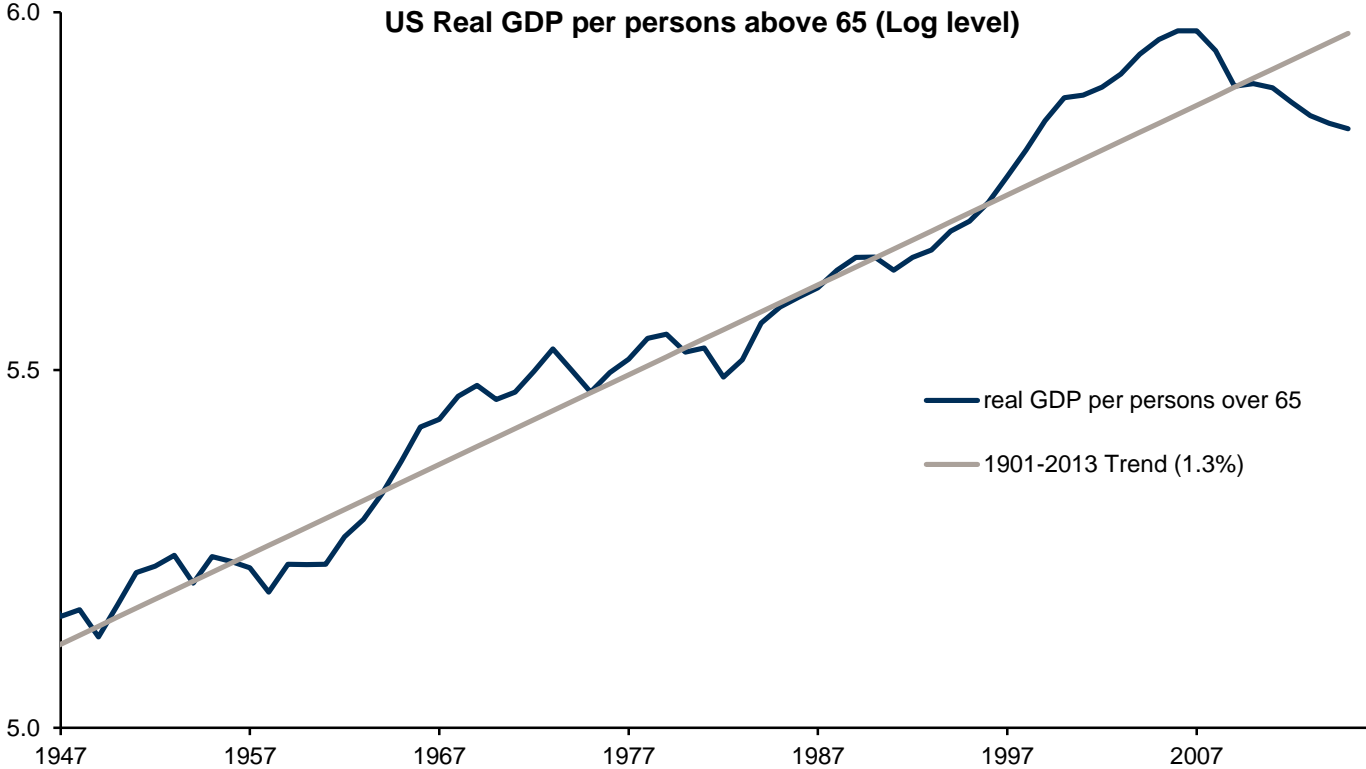
Trends in US Real GDP IV



Source: Haver Analytics®, Credit Suisse

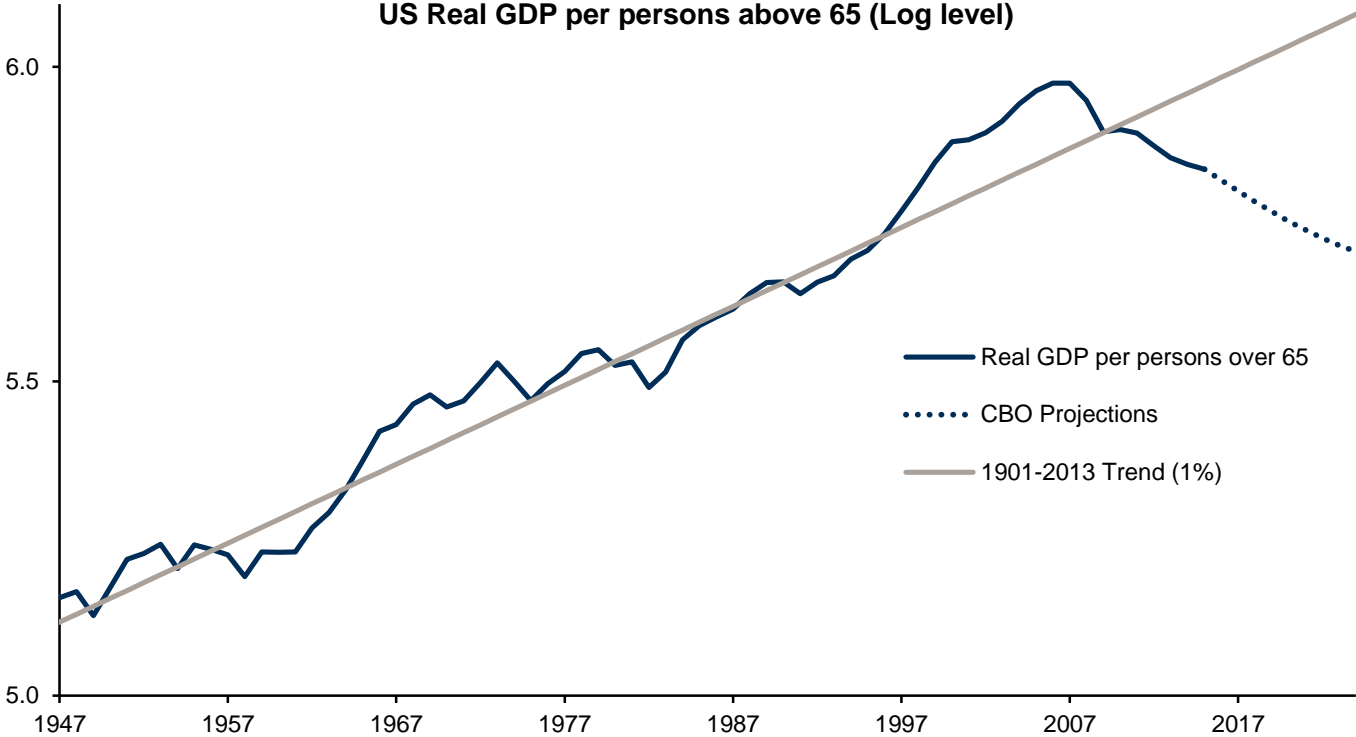


Trends in US Real GDP V



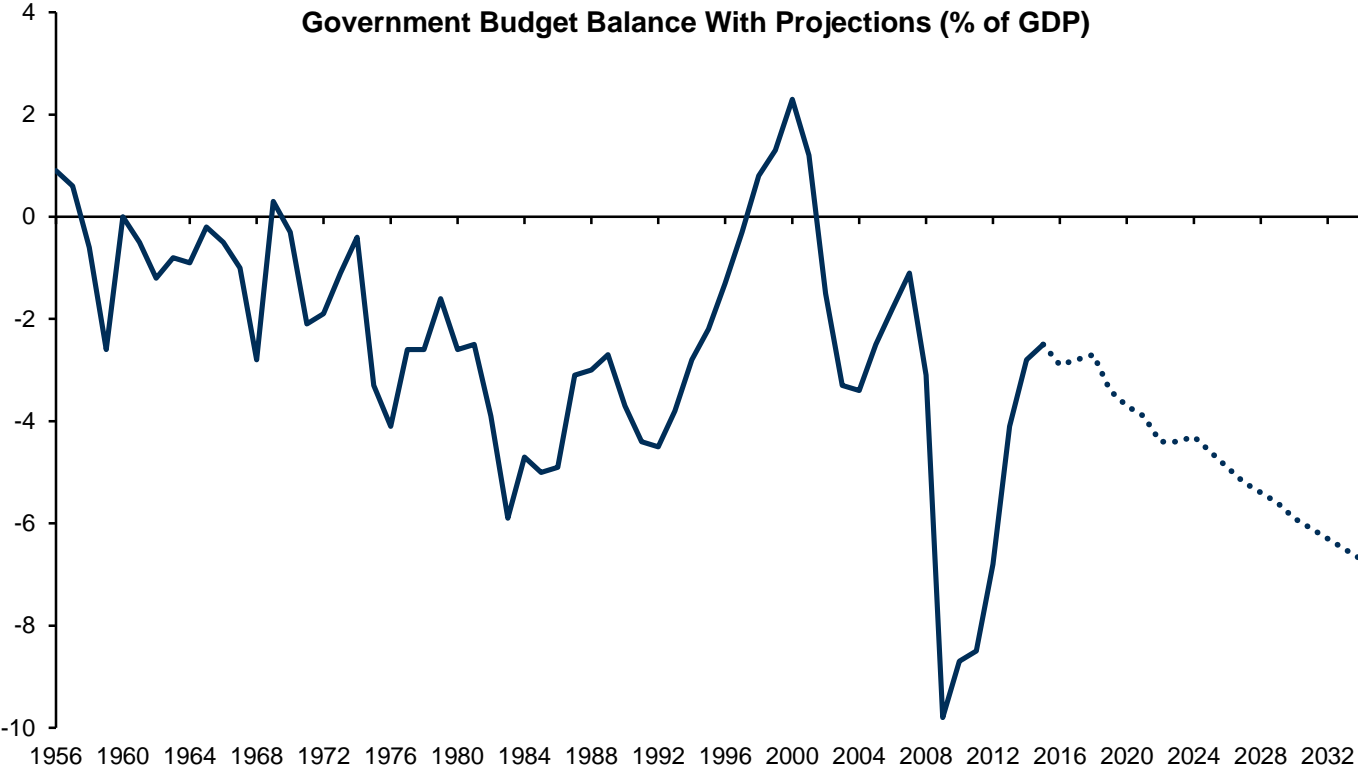
Source: Haver Analytics®, Credit Suisse

Trends in US Real GDP VI



Source: Haver Analytics®, Credit Suisse

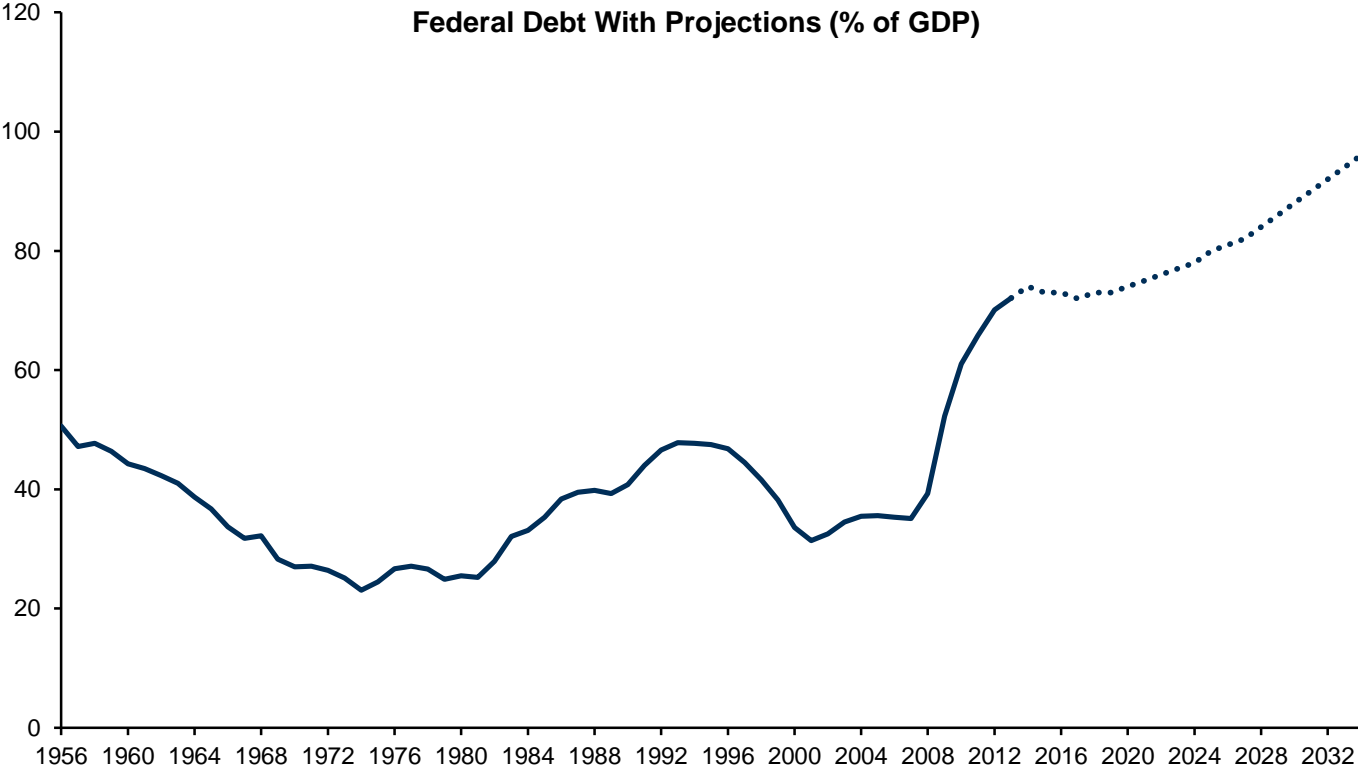
Government Budget Balance With Projections



Source: Haver Analytics®, Credit Suisse

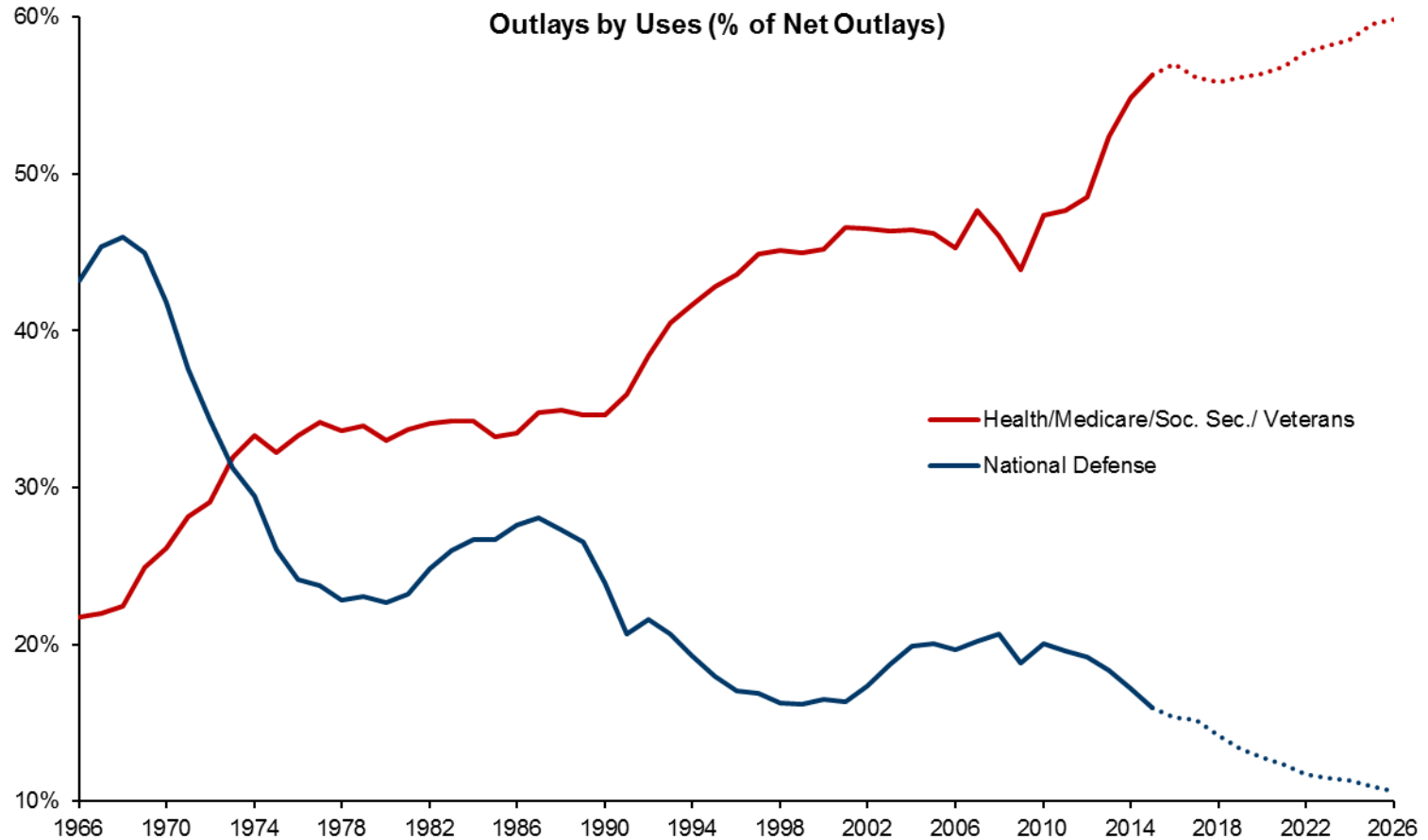


Federal Debt With Projections



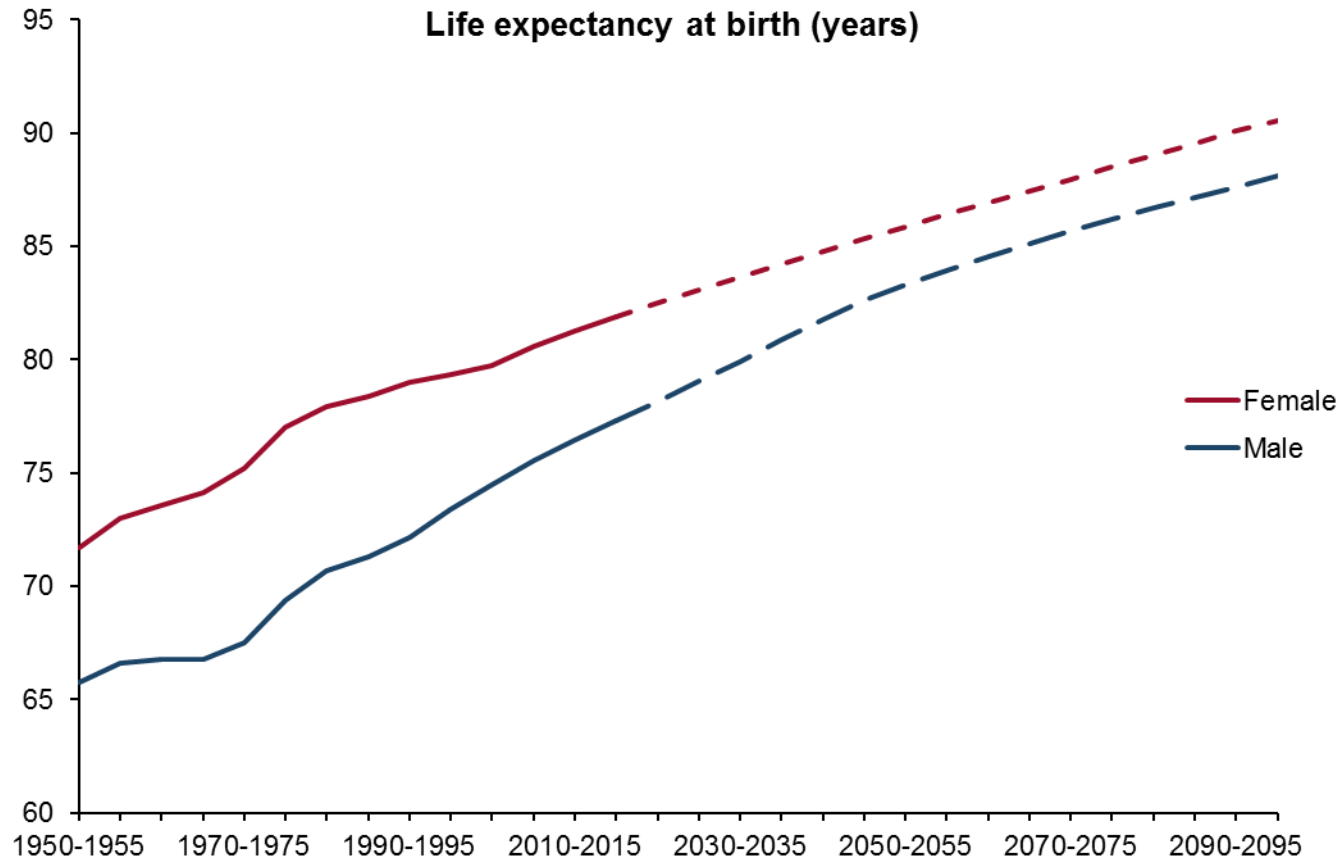
Source: Haver Analytics®, Credit Suisse

Federal Spending With Projections



Source: Haver Analytics®, Credit Suisse

Life Expectancy at Birth



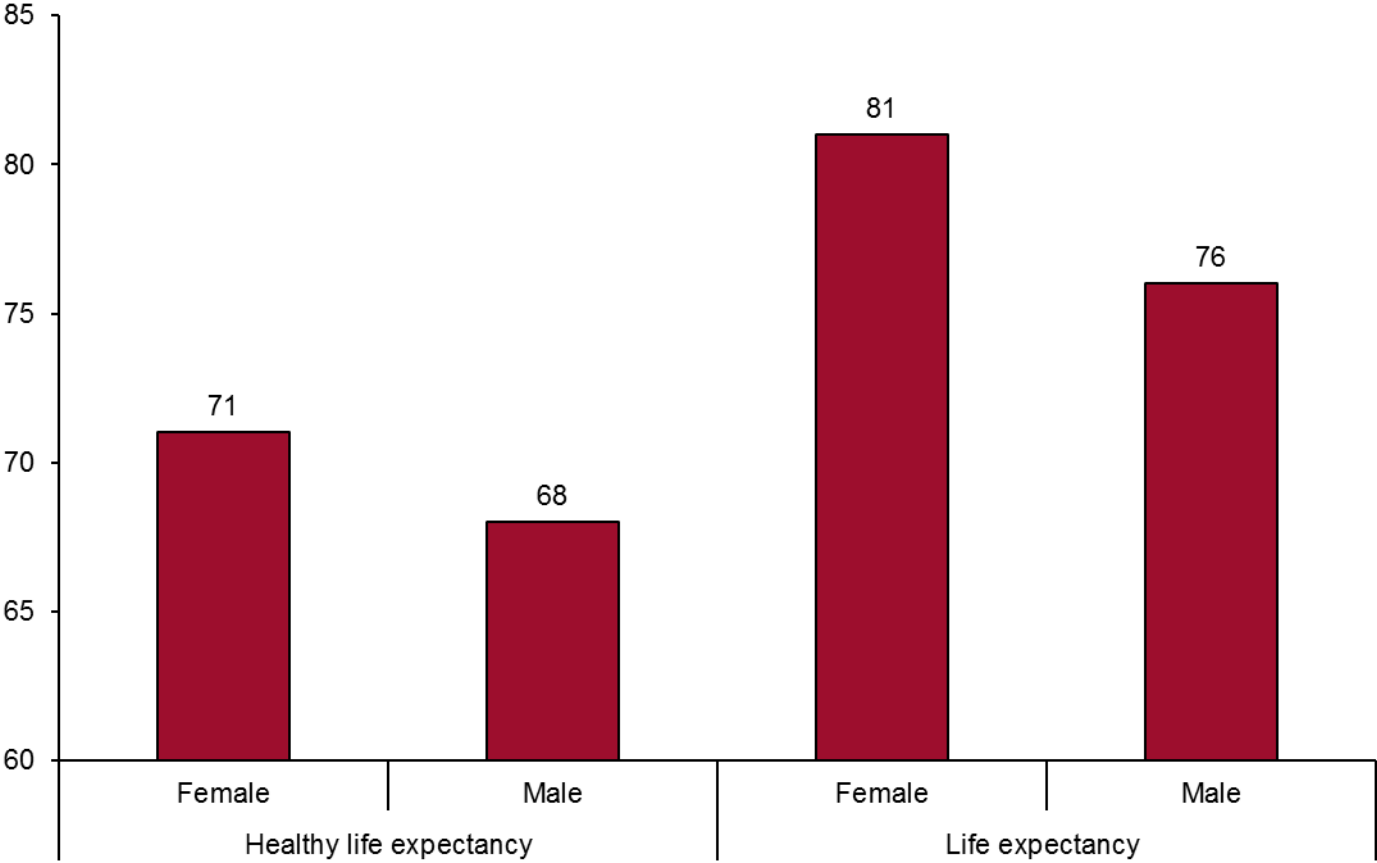
Source: UN, Credit Suisse

Life Expectancy at Age 60 and Age 80



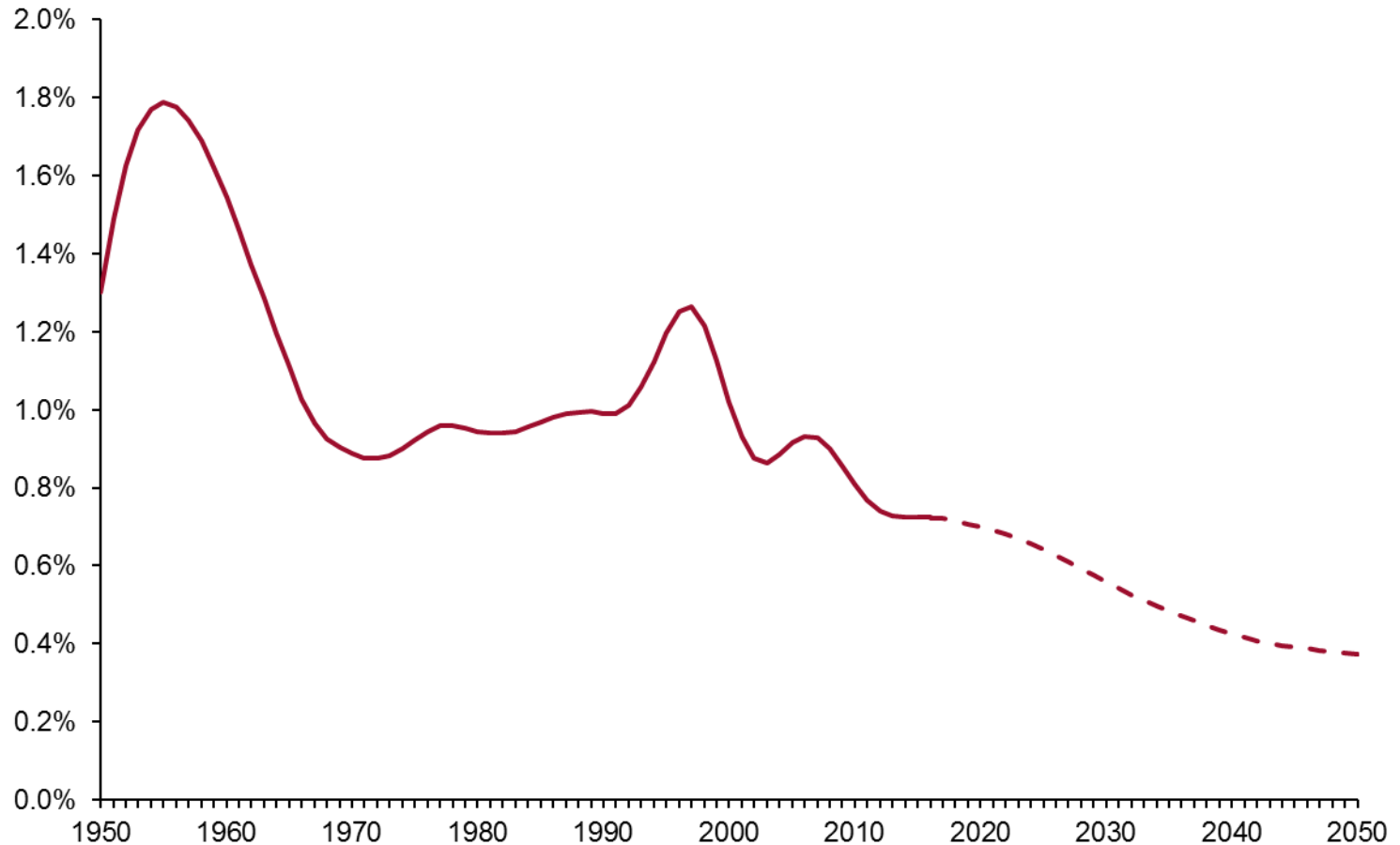
Source: UN, Credit Suisse

Healthy Life Expectancy



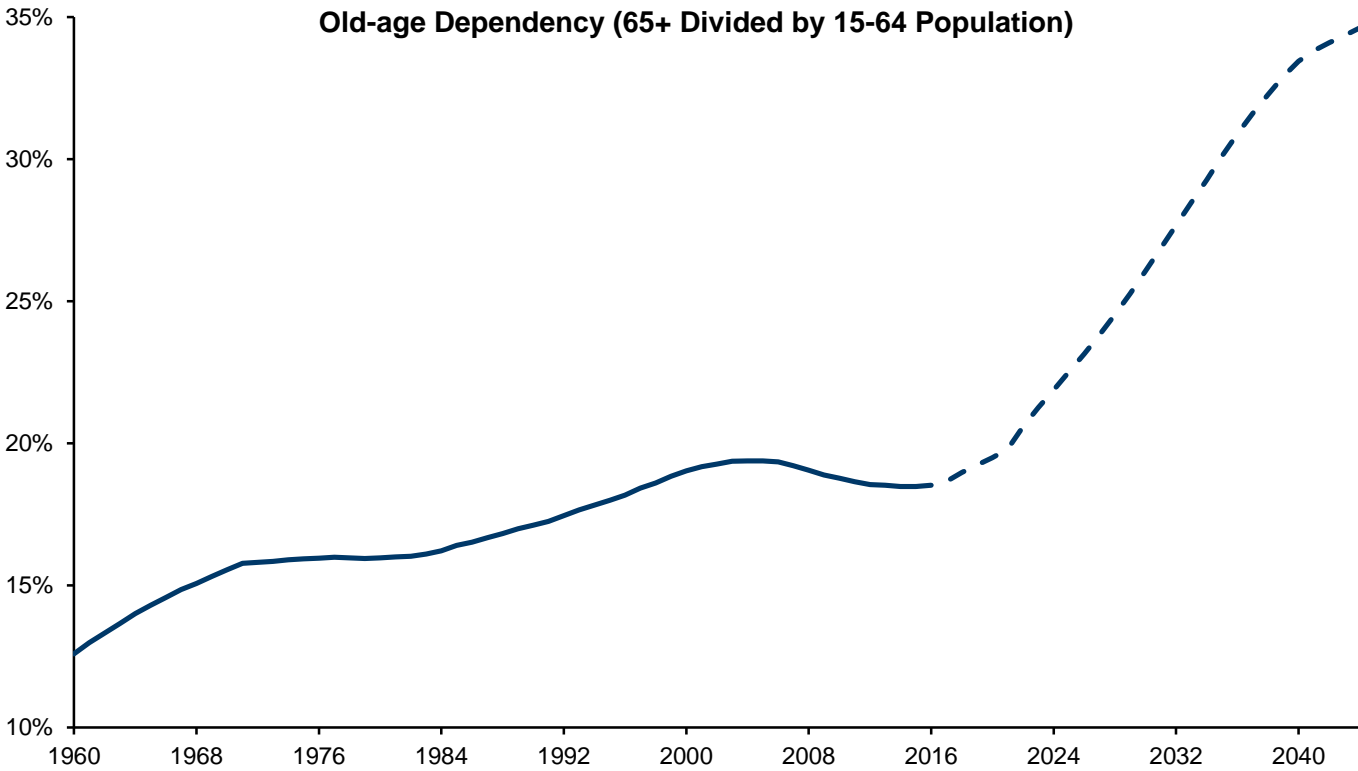
Source: WHO (2013), Credit Suisse

Population Growth



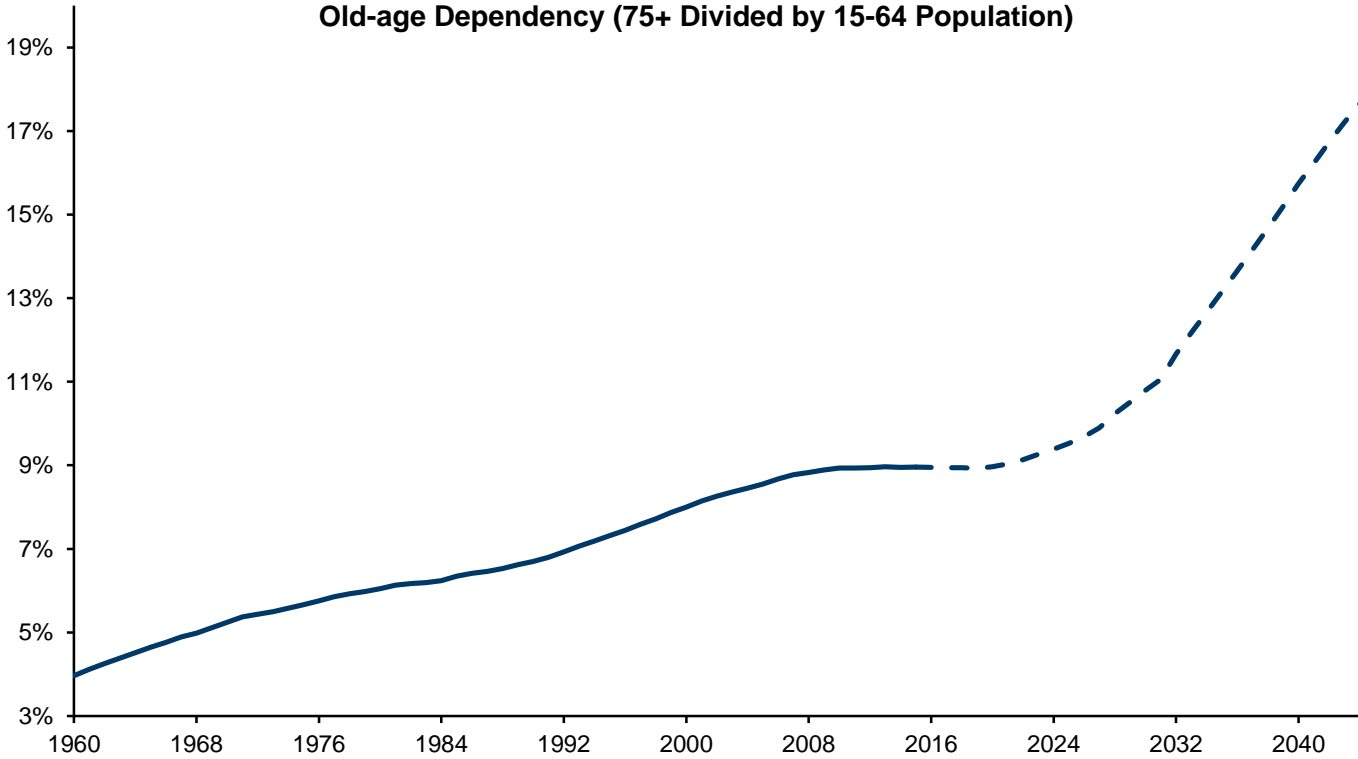
Source: UN, Credit Suisse

Old-age Dependency I



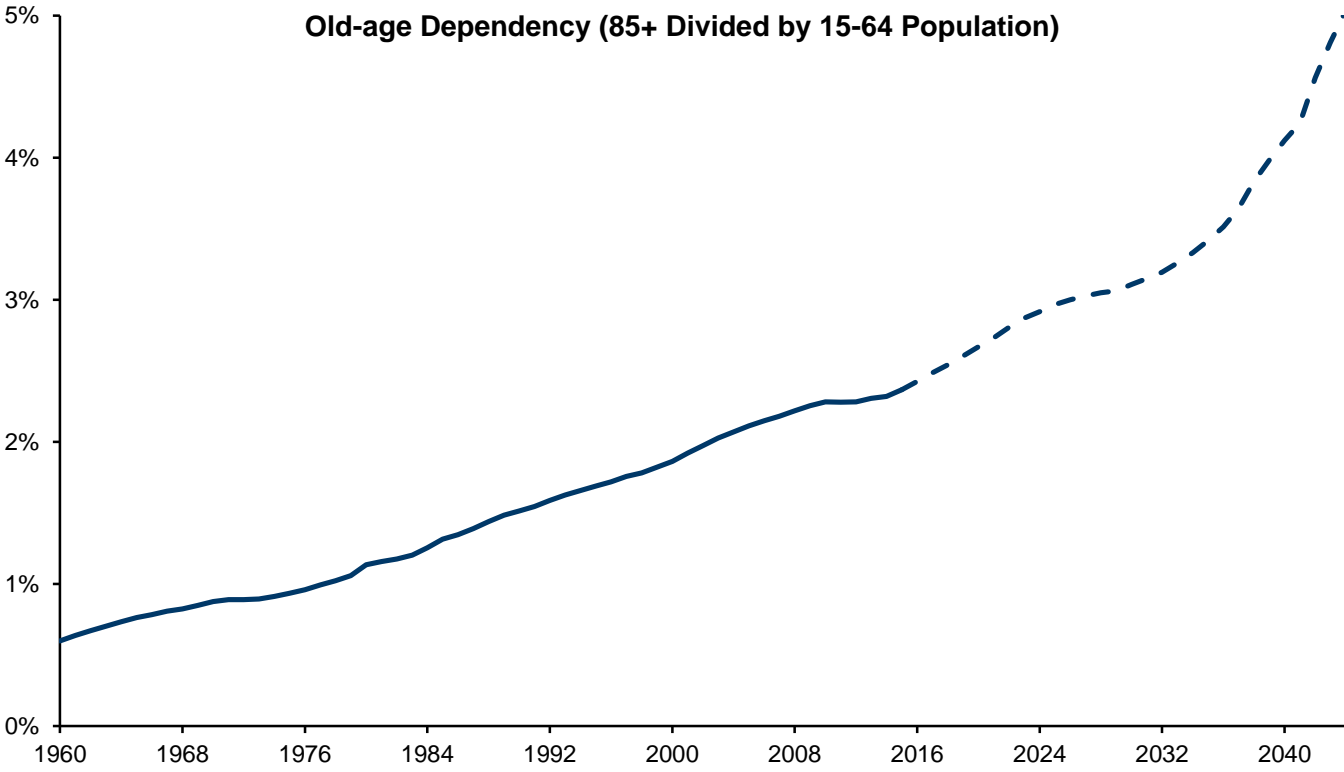
Source: Haver Analytics®, Credit Suisse

Old-age Dependency II



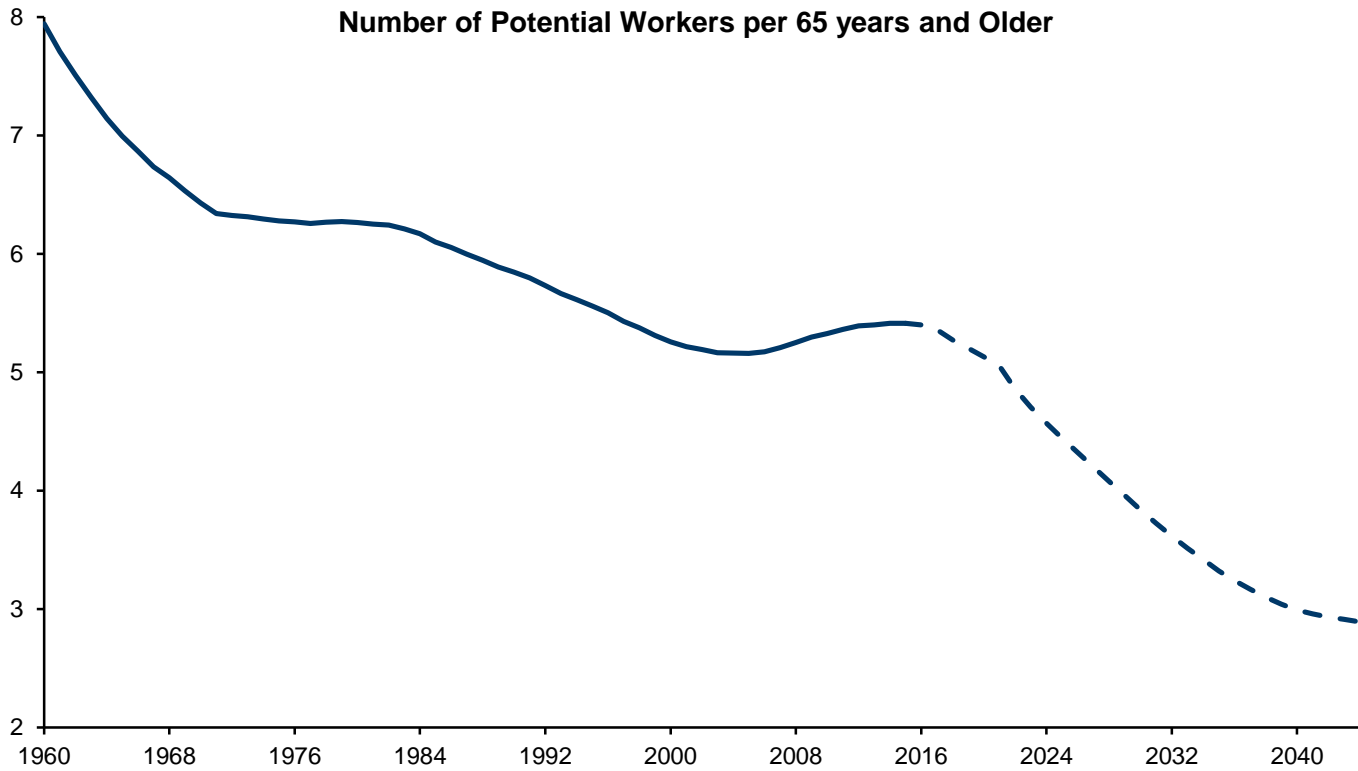
Source: Haver Analytics®, Credit Suisse

Old-age Dependency III



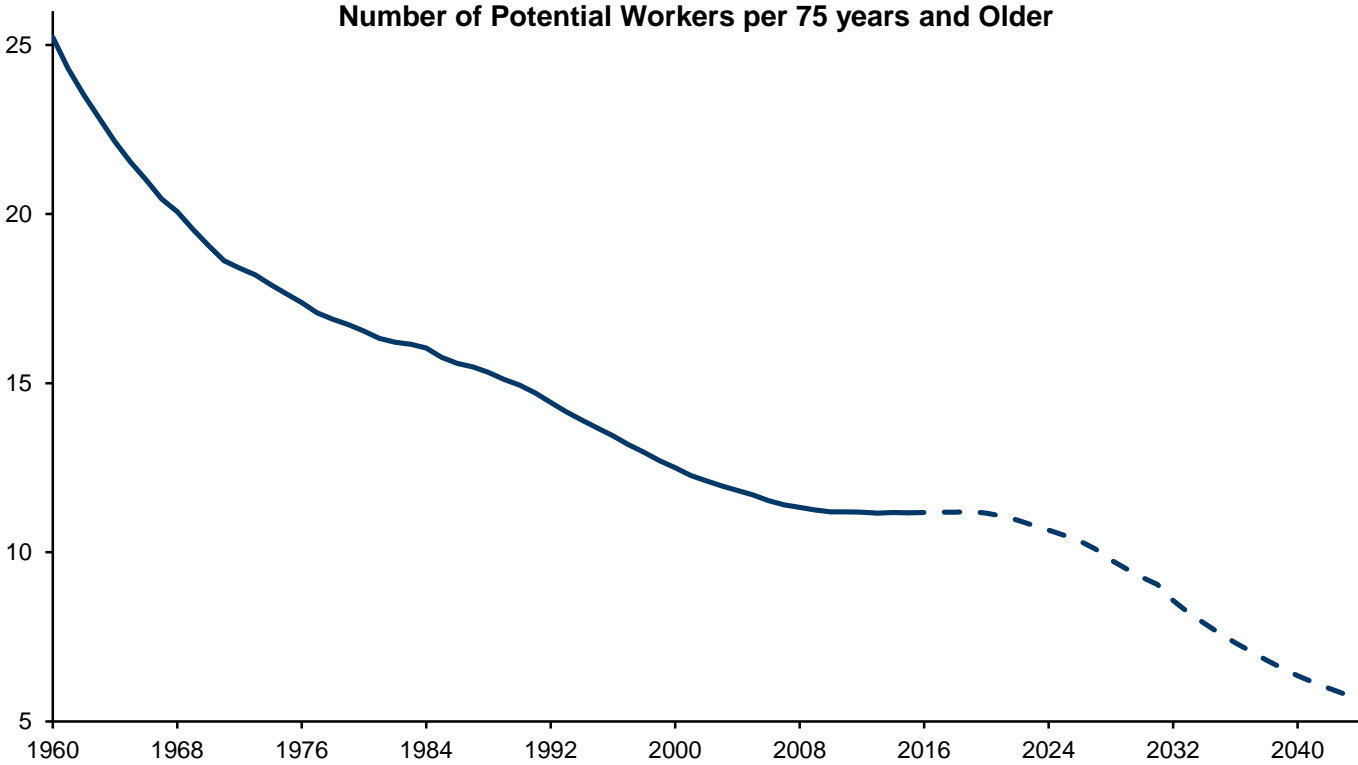
Source: Haver Analytics®, Credit Suisse

Old-age Dependency IV



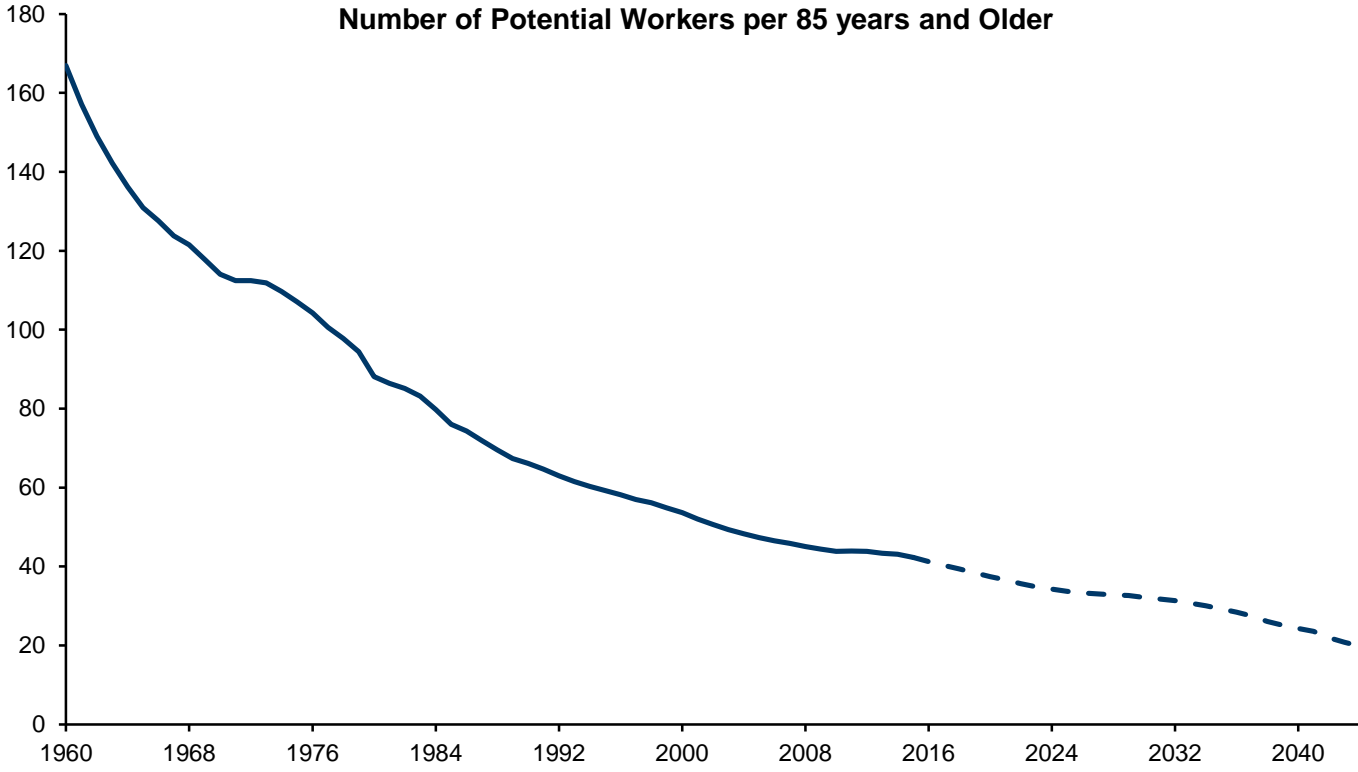
Source: Haver Analytics®, Credit Suisse

Old-age Dependency V



Source: Haver Analytics®, Credit Suisse

Old-age Dependency VI



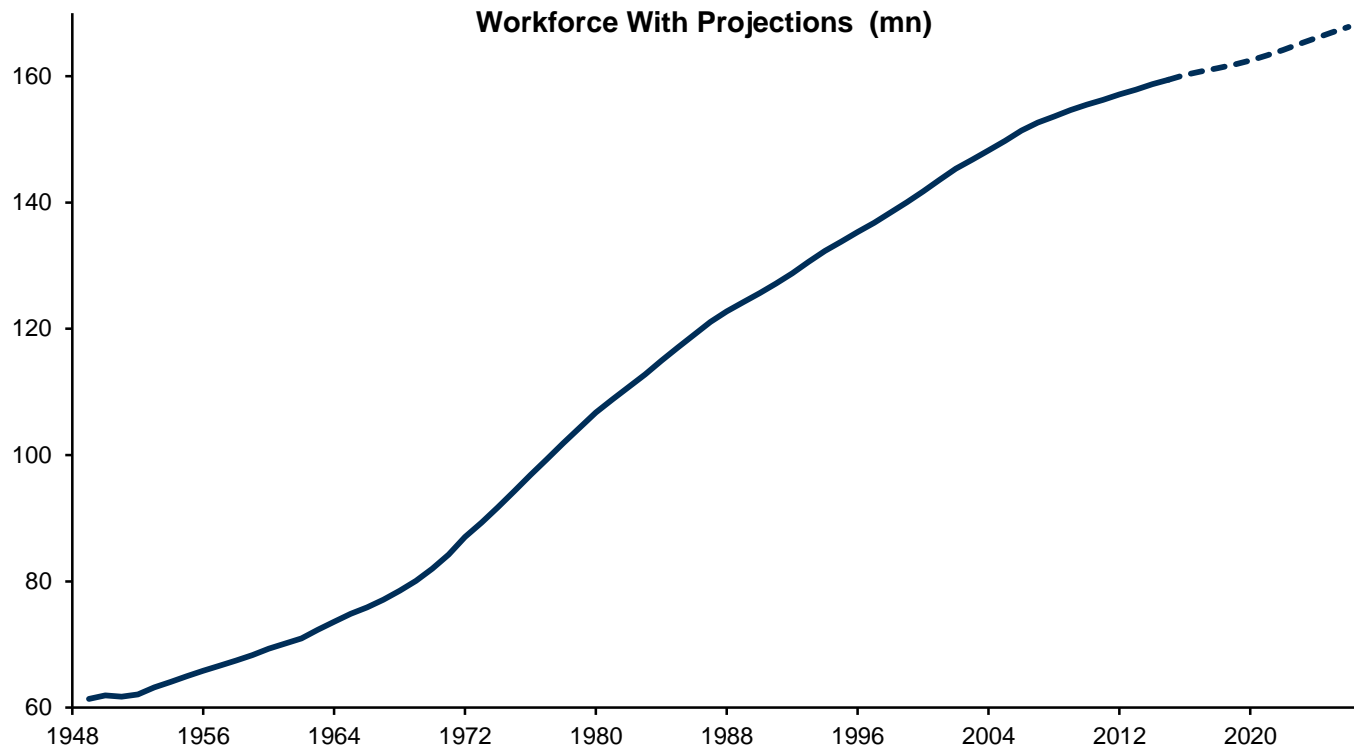
Source: Haver Analytics®, Credit Suisse

Potential GDP as a Supply-Side Concept

3 P's of Potential

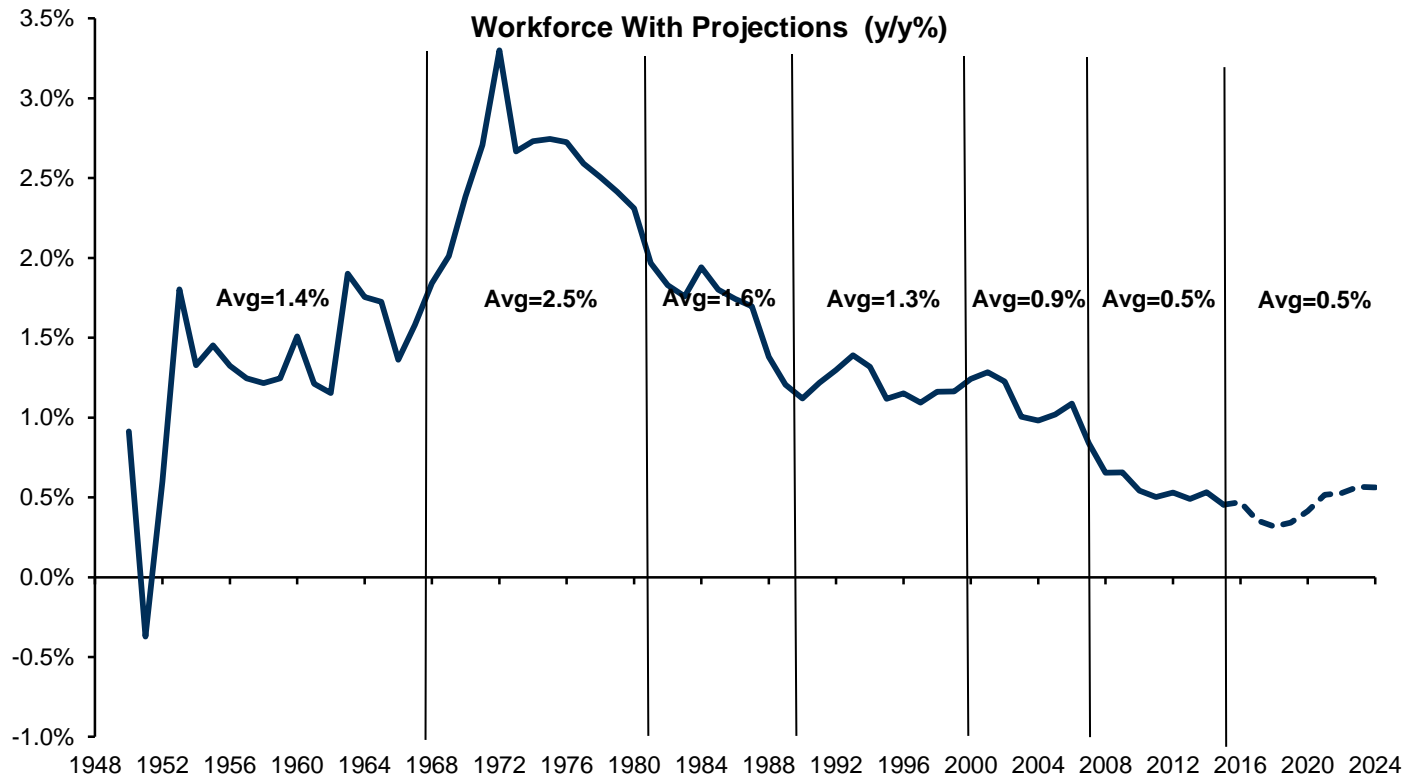
- Population
- Participation
- Productivity

Potential Workforce With Projections I



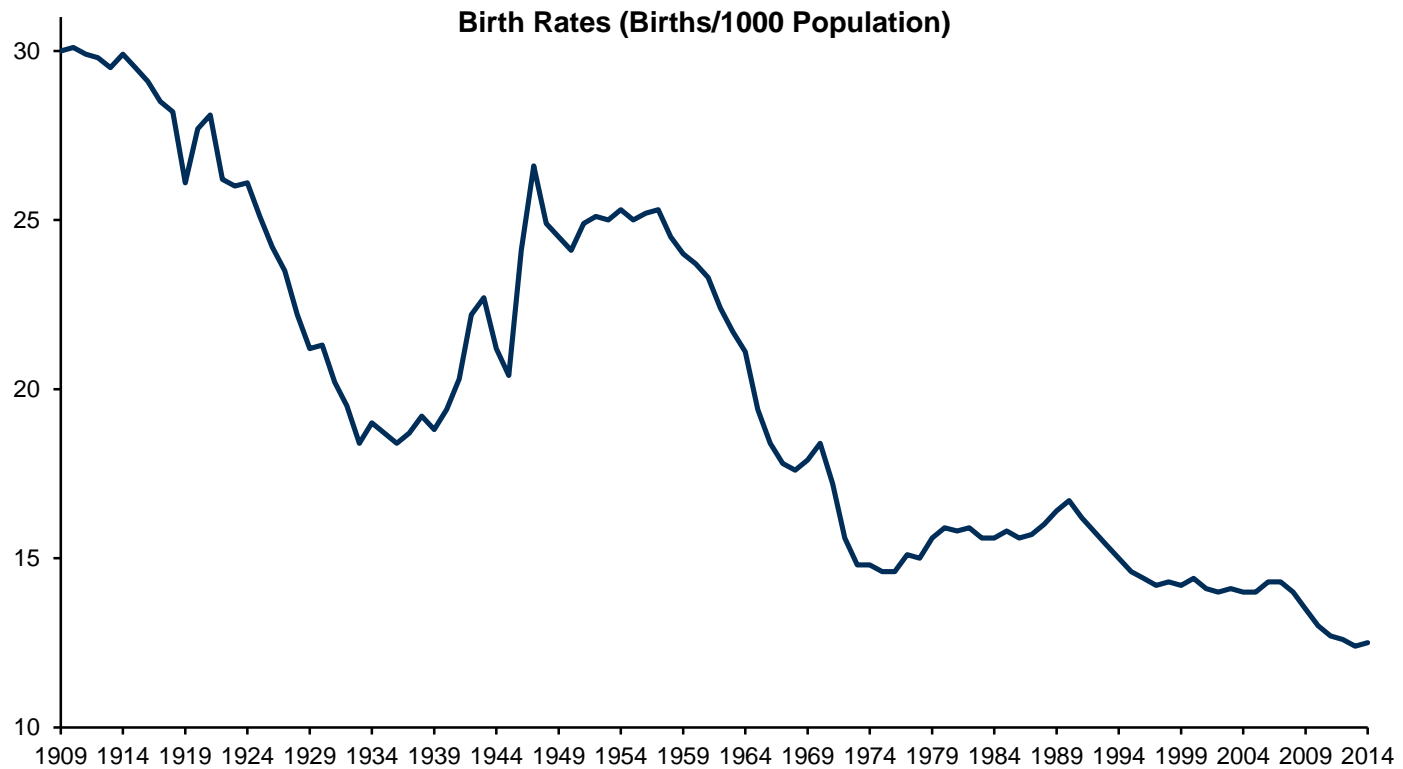
Source: Haver Analytics®, Credit Suisse

Potential Work Force With Projections II



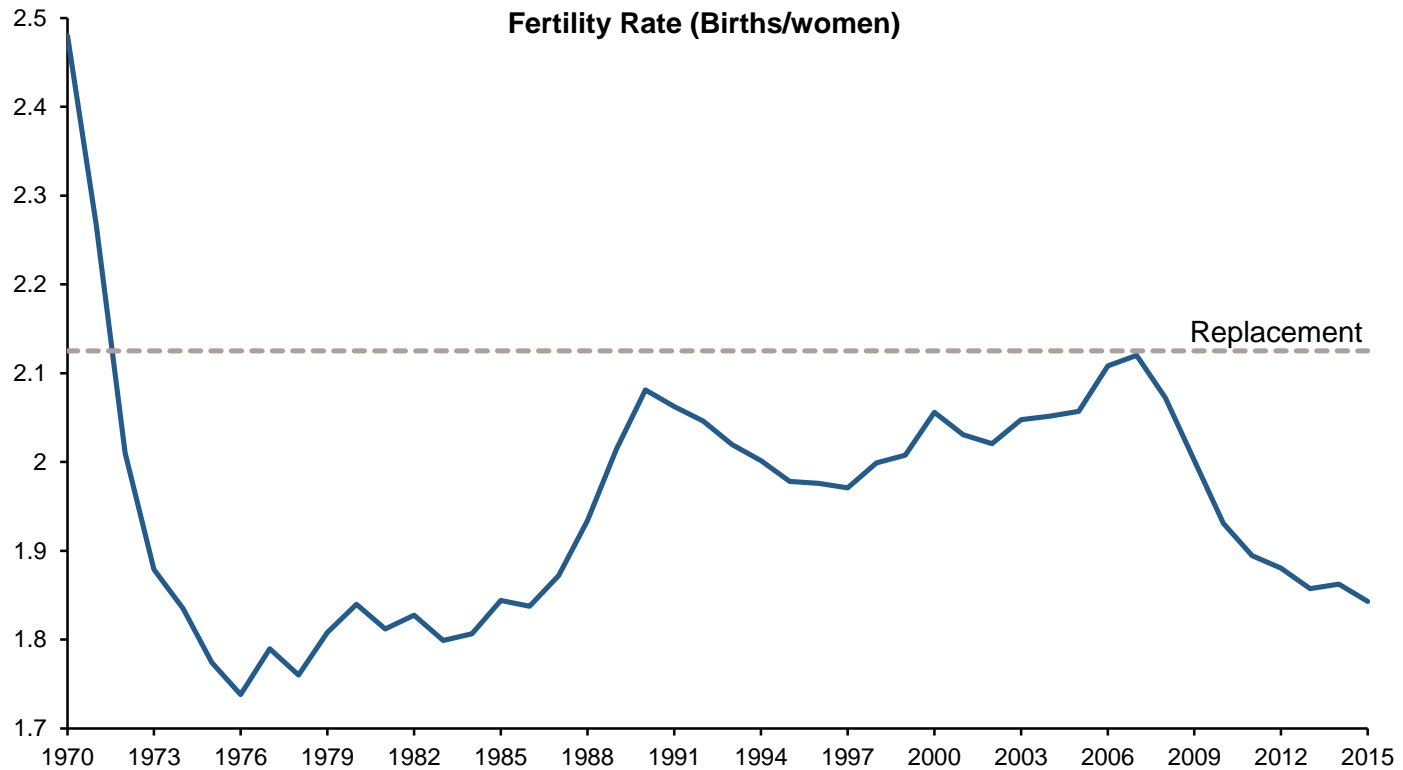
Source: Haver Analytics®, Credit Suisse

Birth Rate



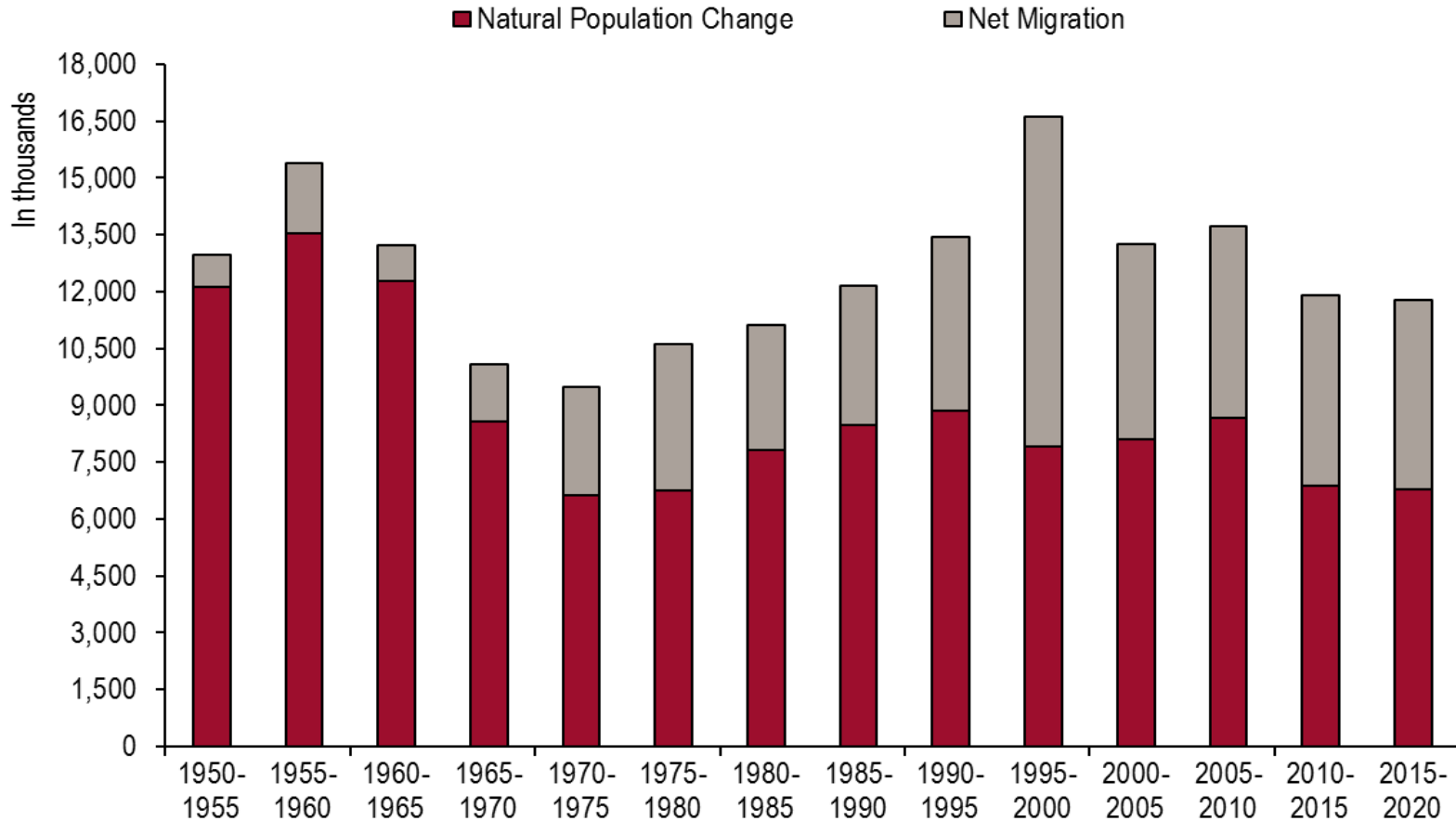
Source: CDC, Credit Suisse

Fertility Rate



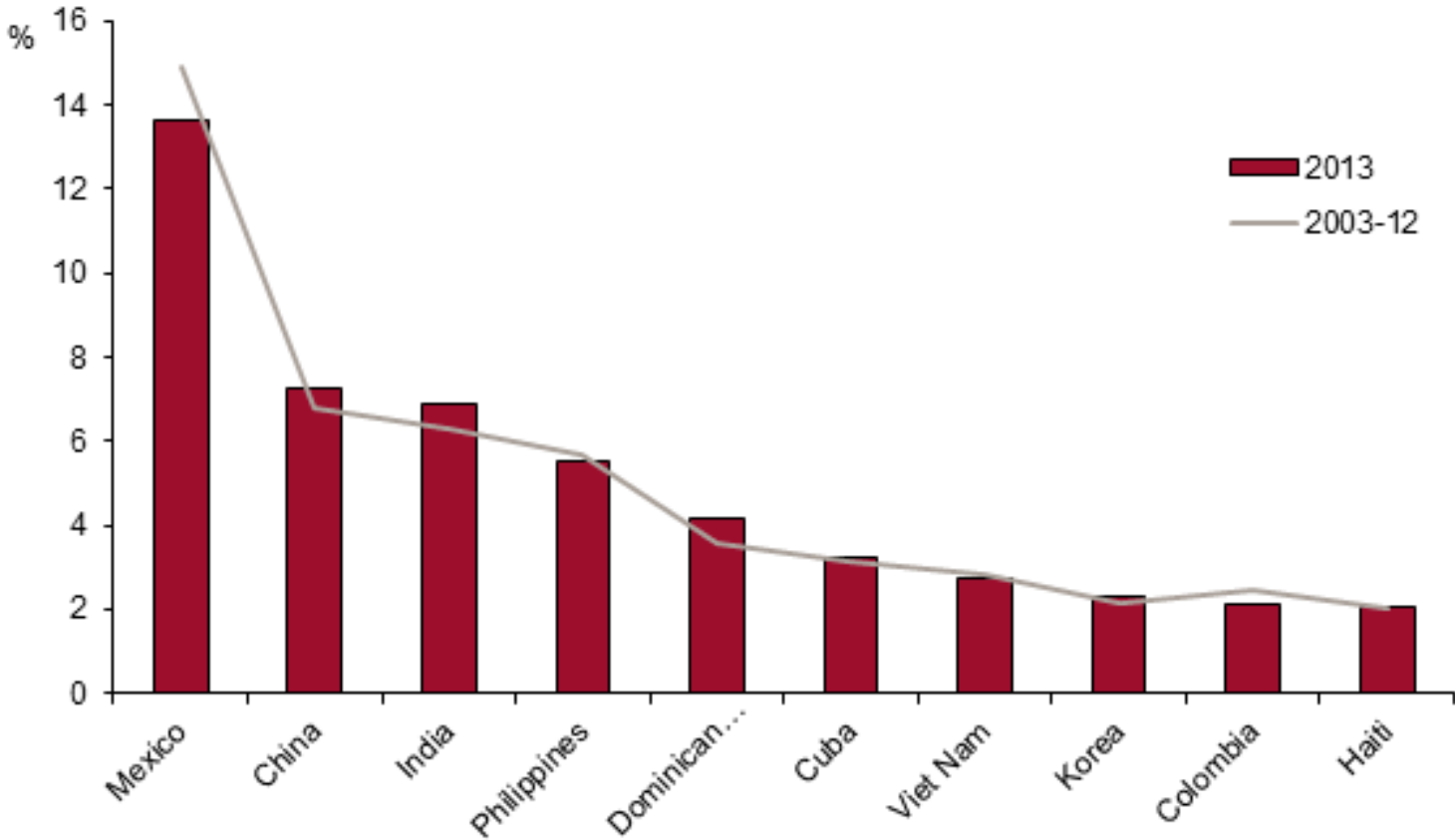
Source: CDC, Credit Suisse

Natural and Net Migration Population Growth



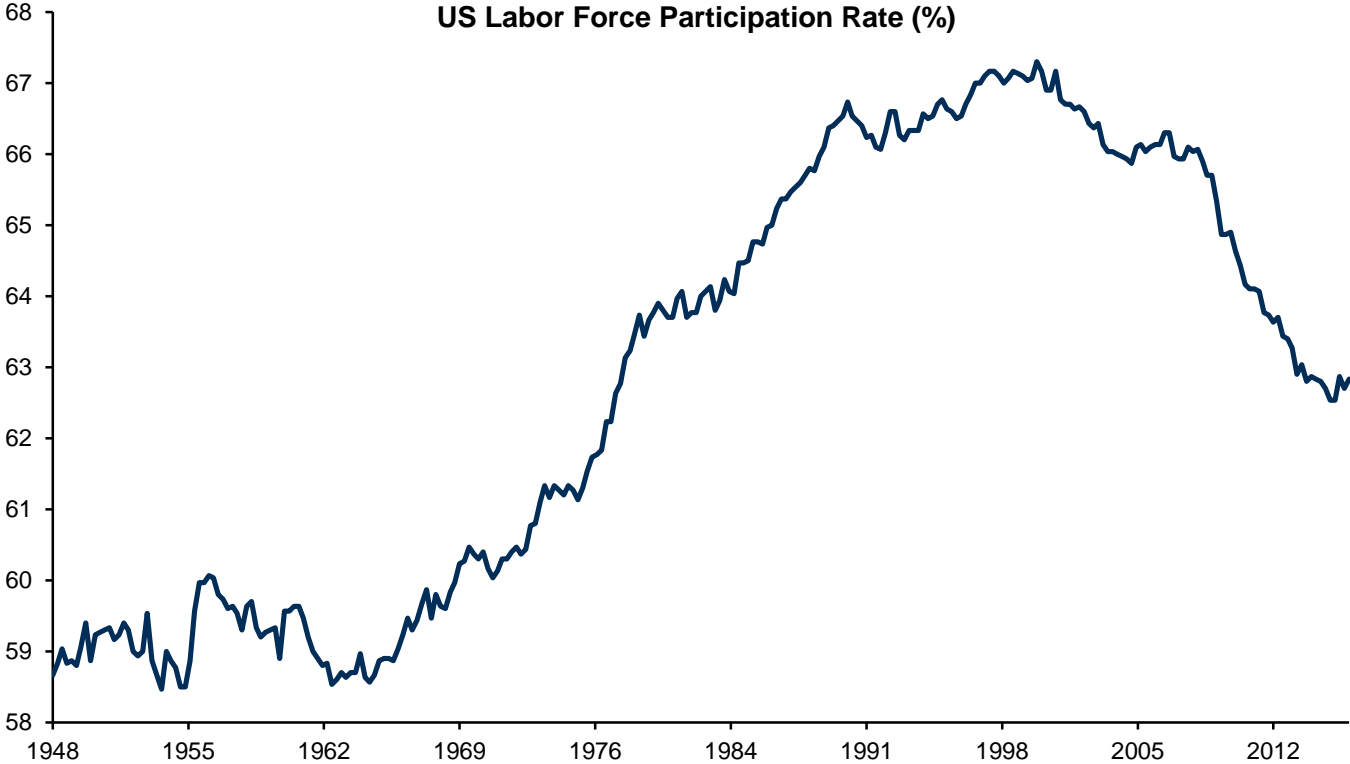
Source: UN, Credit Suisse

Annual Migrant Provenance by Country (%)



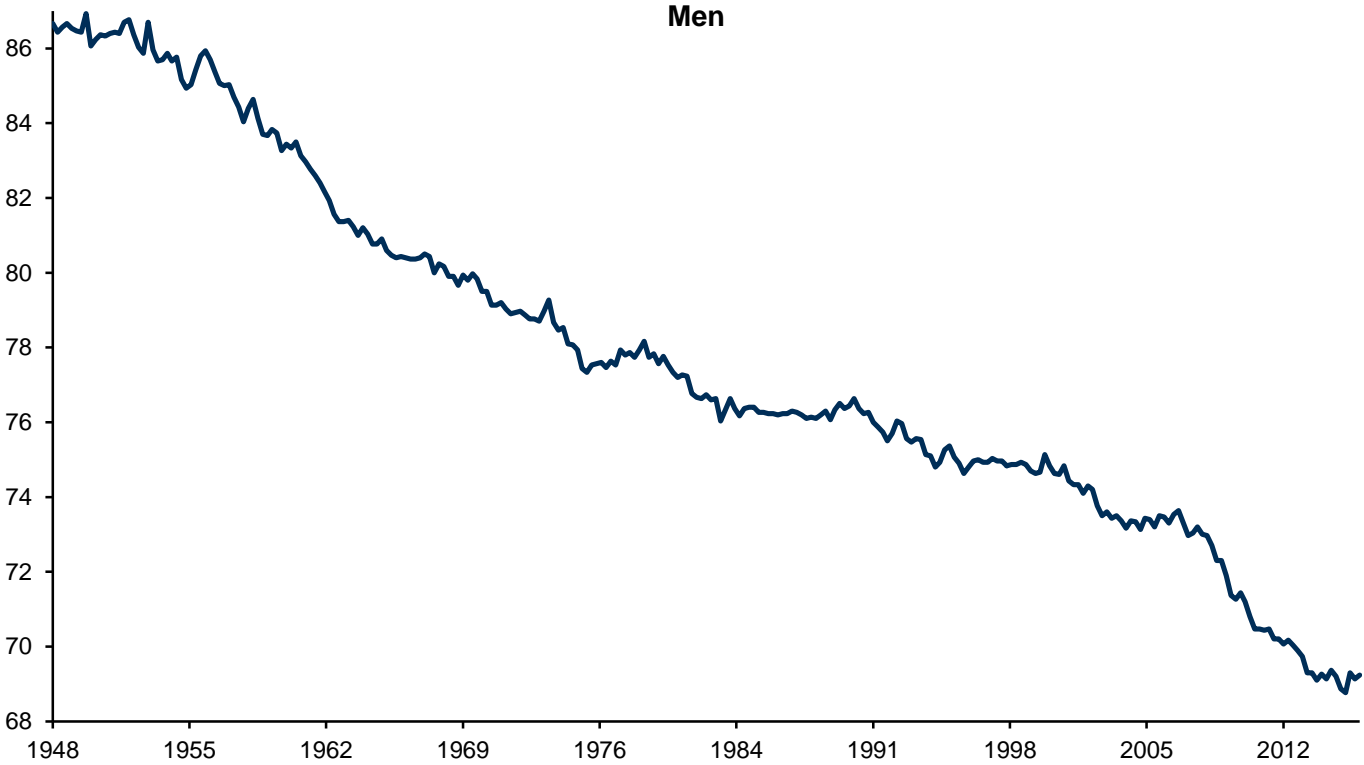
Source: OECD, Credit Suisse

Trends in Labor Force Participation I



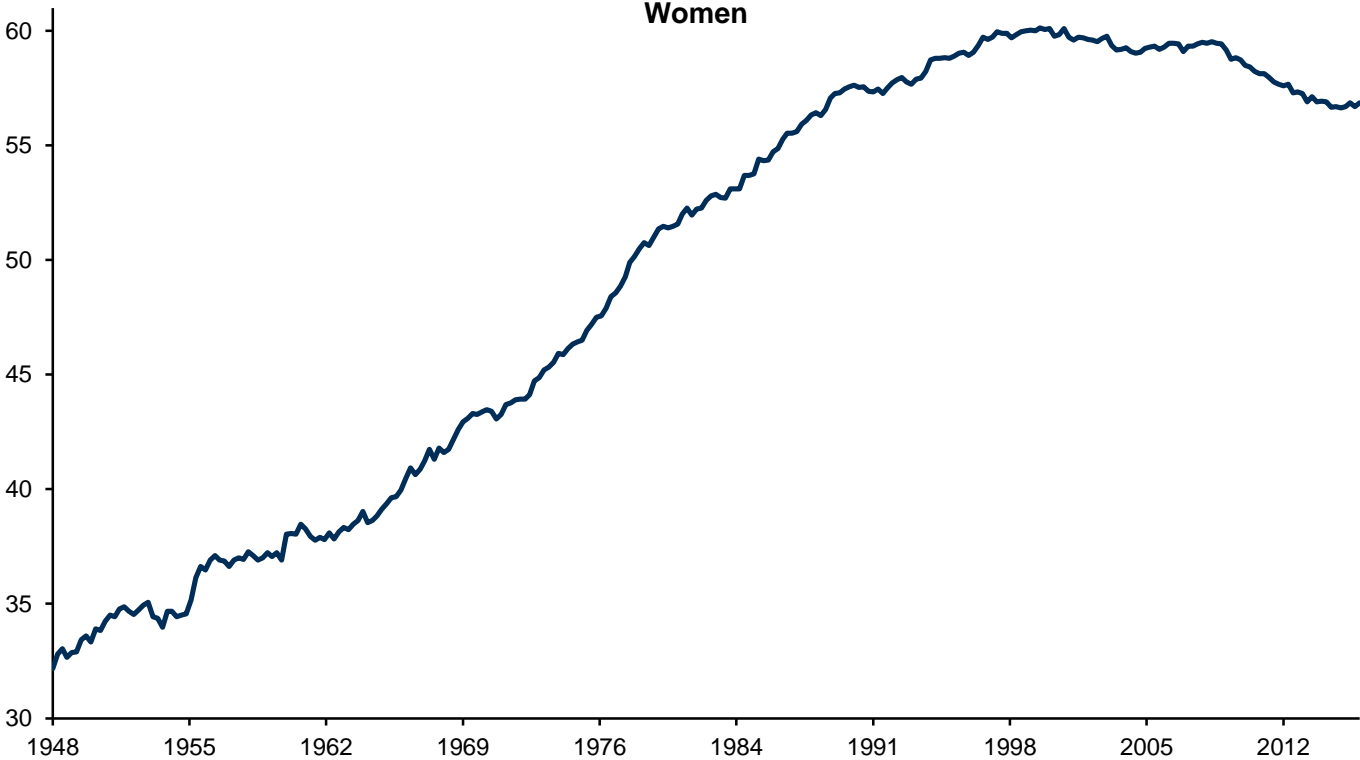
Source: Haver Analytics®, Credit Suisse

Trends in Labor Force Participation II



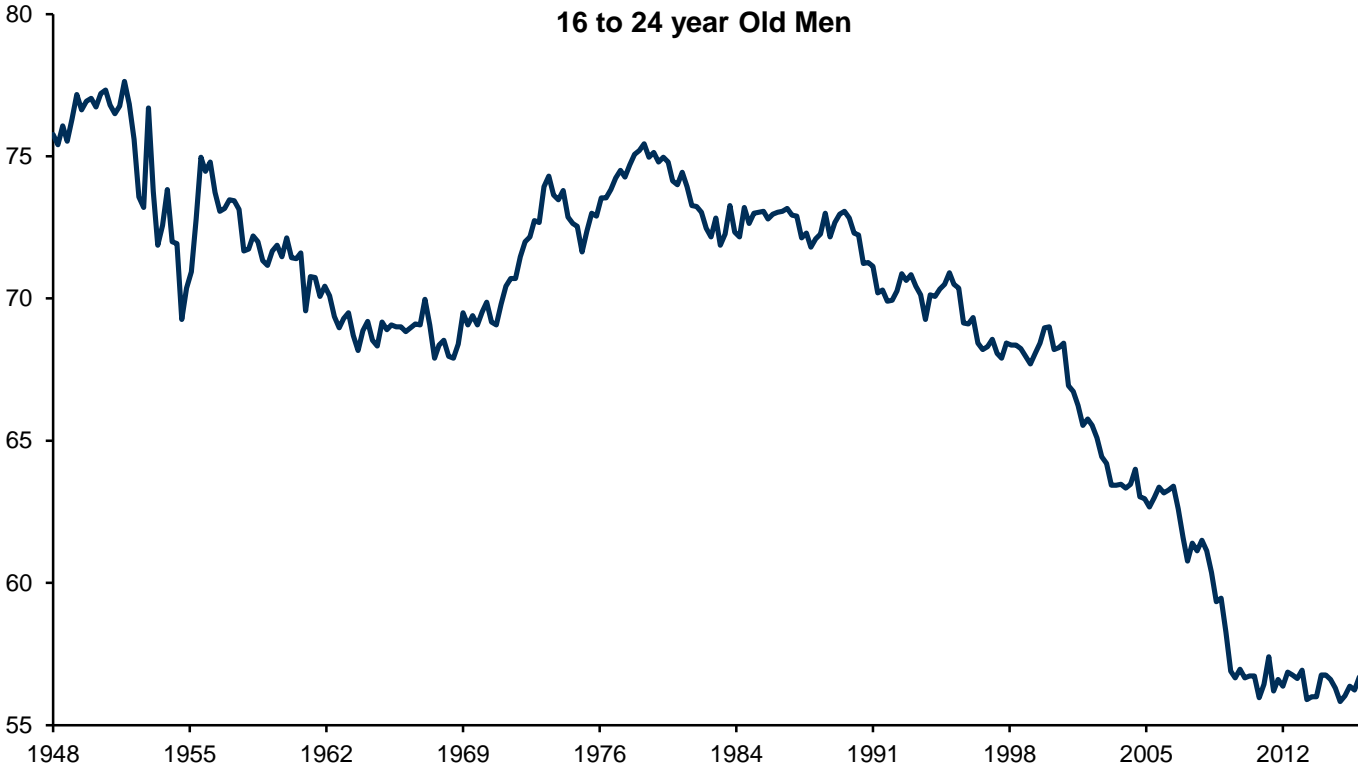
Source: Haver Analytics®, Credit Suisse

Trends in Labor Force Participation III



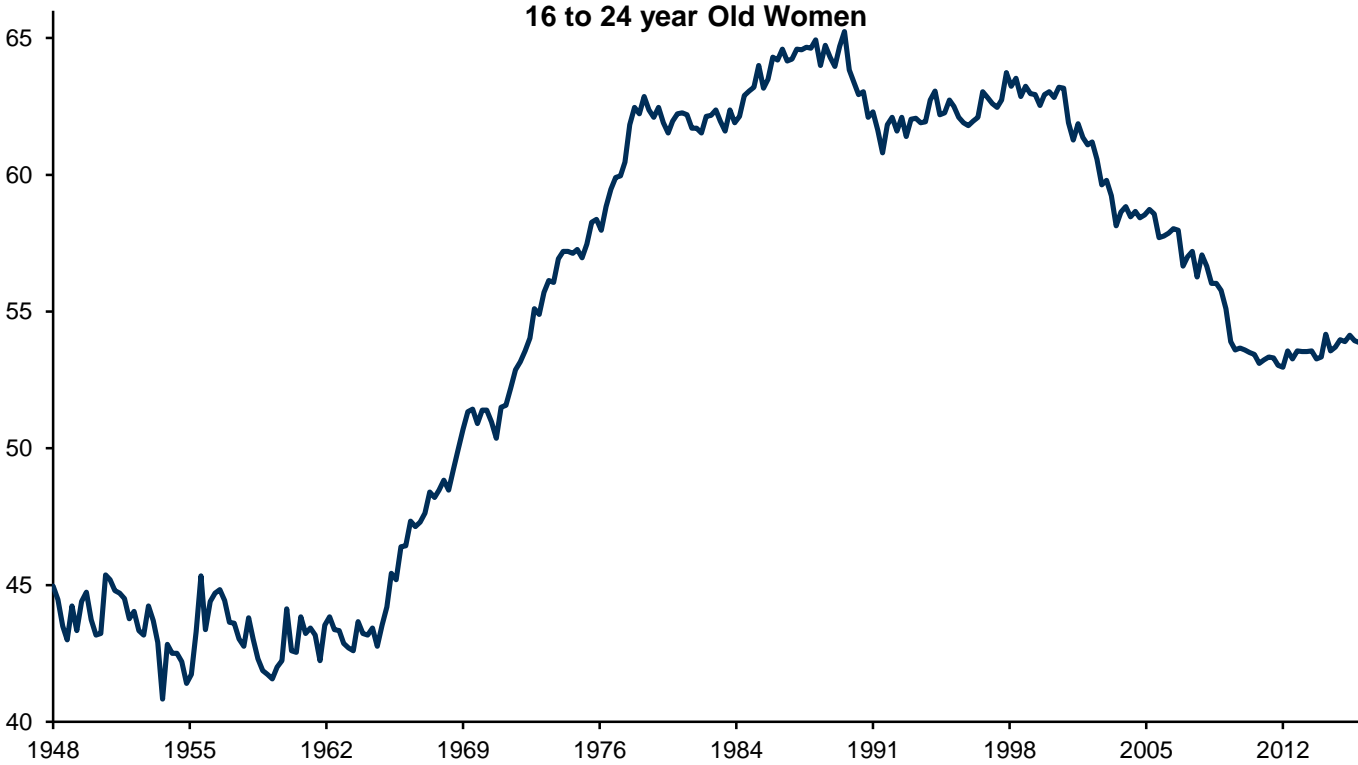
Source: Haver Analytics®, Credit Suisse

Trends in Labor Force Participation IV



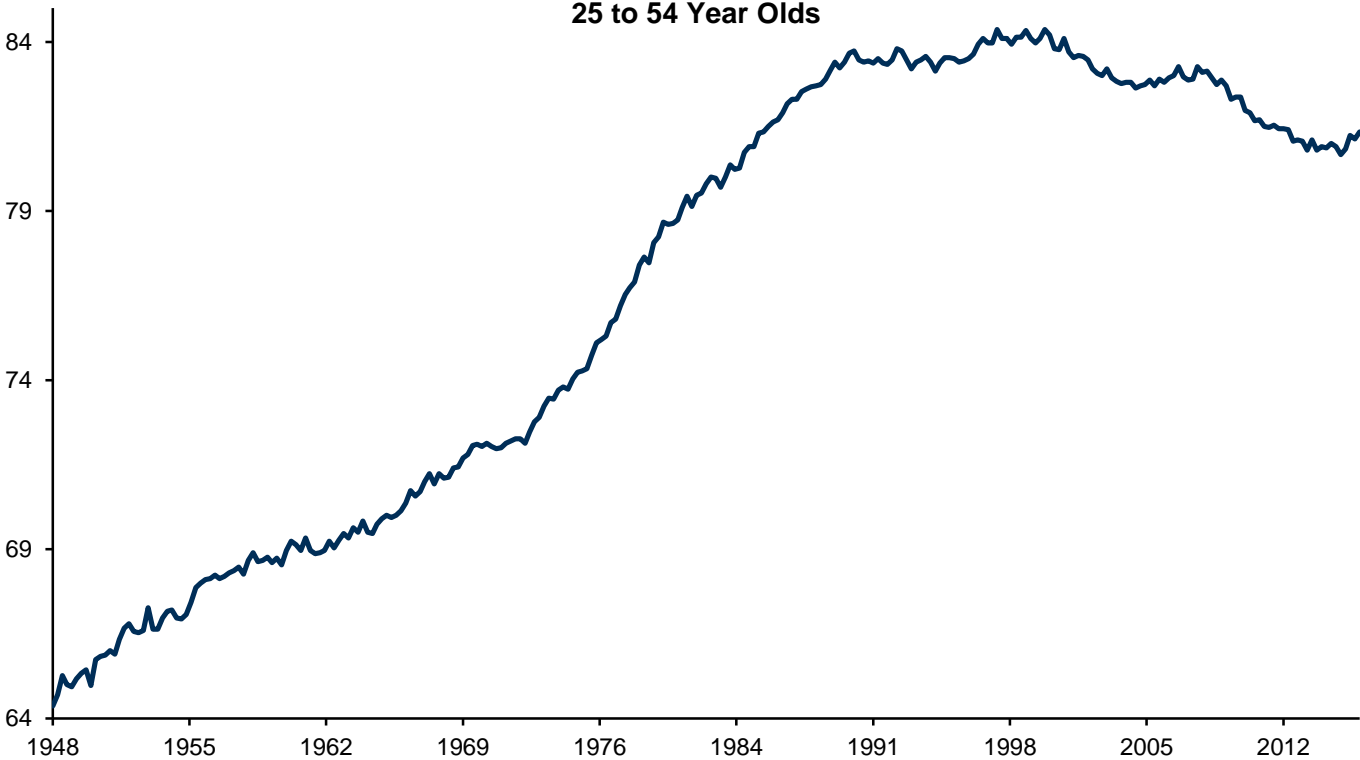
Source: Haver Analytics®, Credit Suisse

Trends in Labor Force Participation V



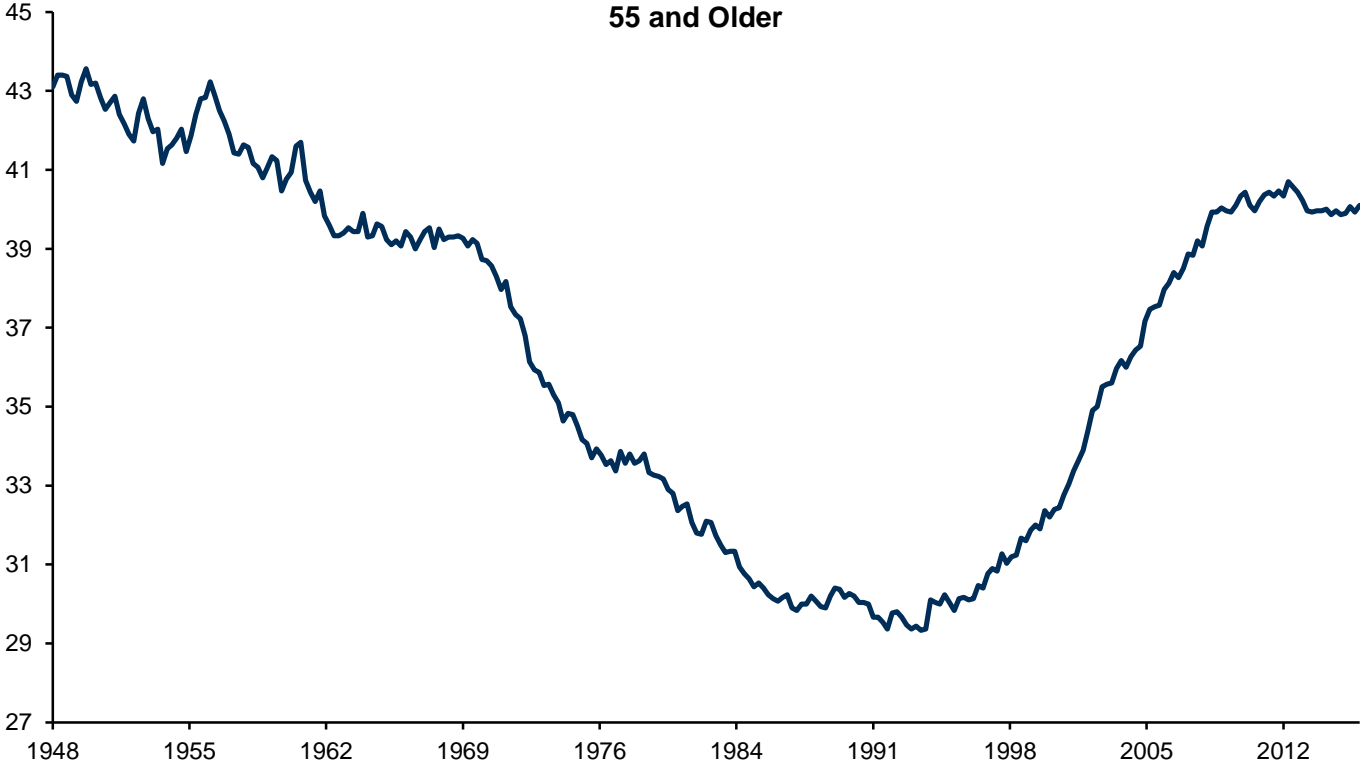
Source: Haver Analytics®, Credit Suisse

Trends in Labor Force Participation VI



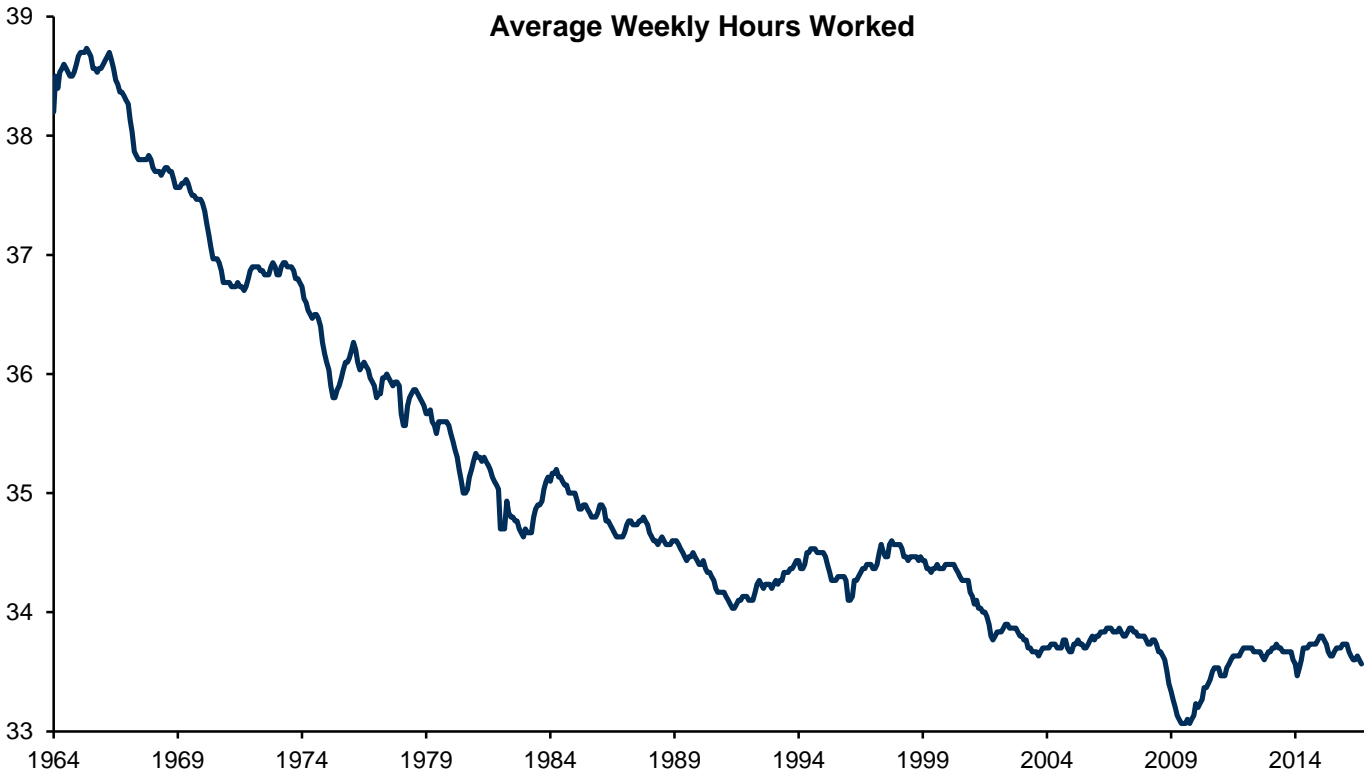
Source: Haver Analytics®, Credit Suisse

Trends in Labor Force Participation VII



Source: Haver Analytics®, Credit Suisse

Average Work Week I



Source: Haver Analytics®, Credit Suisse



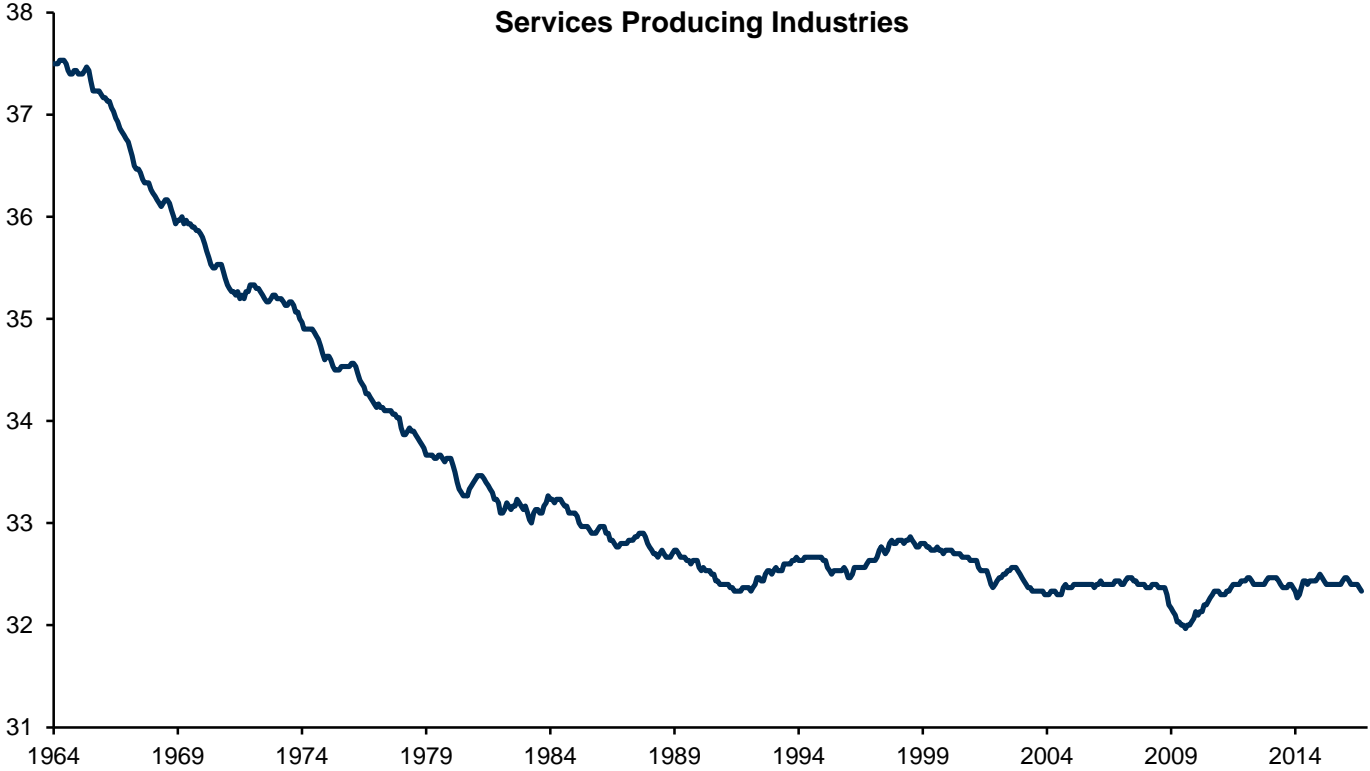
Average Work Week II



Source: Haver Analytics®, Credit Suisse



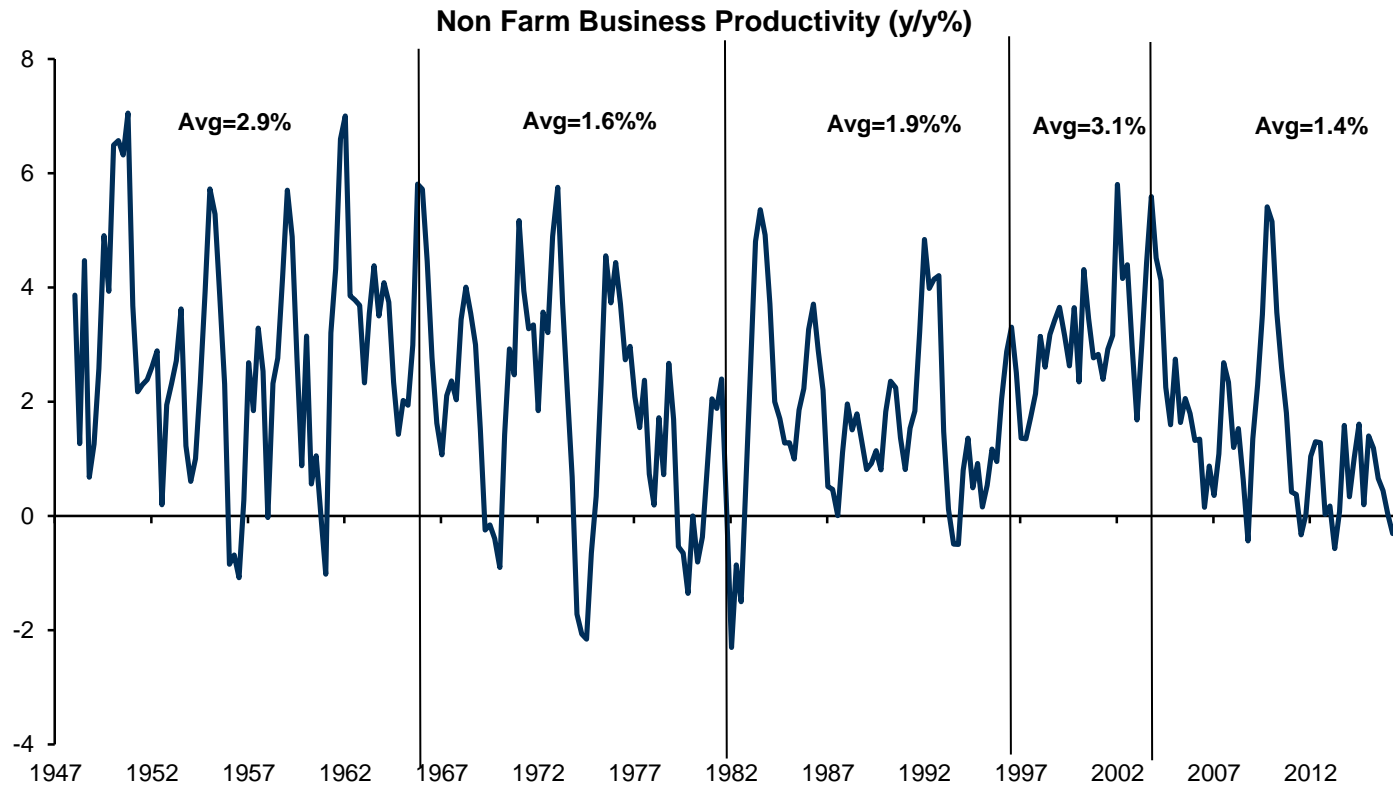
Average Work Week III



Source: Haver Analytics®, Credit Suisse

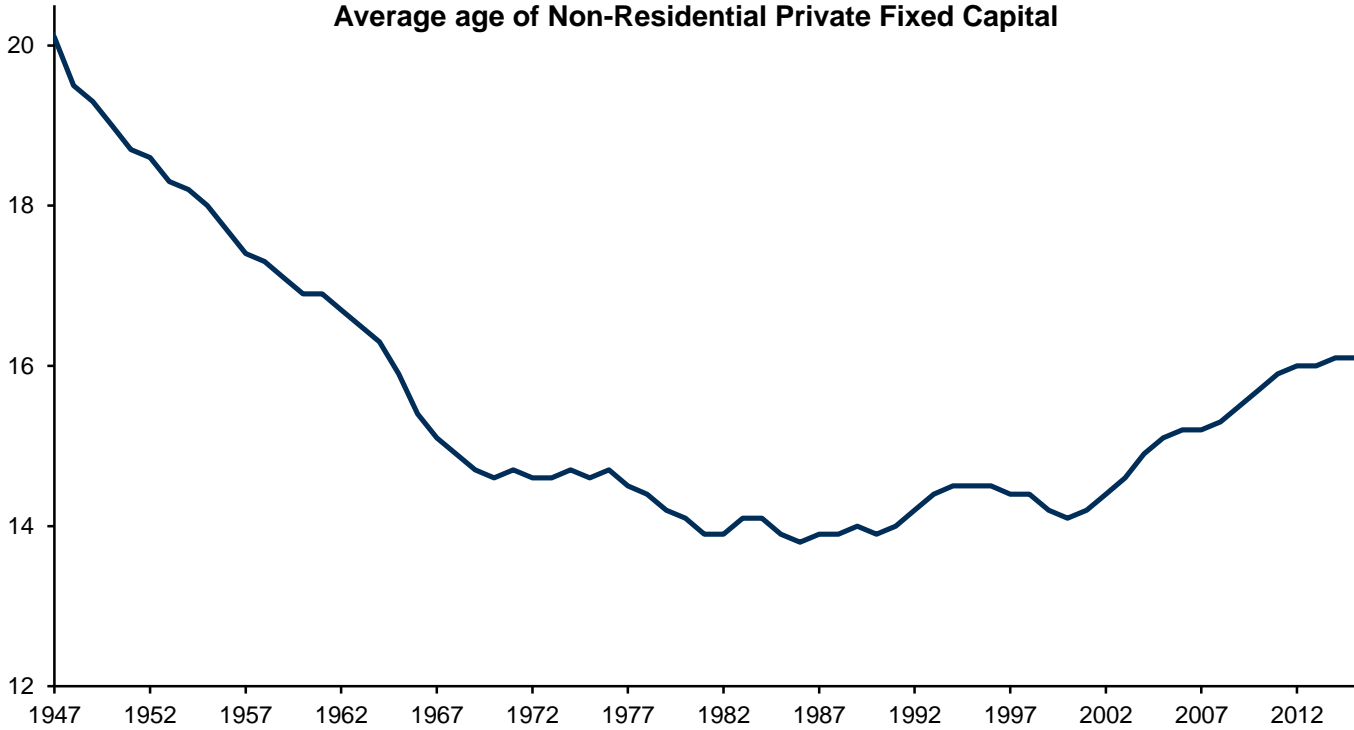


Non-Farm Business Productivity



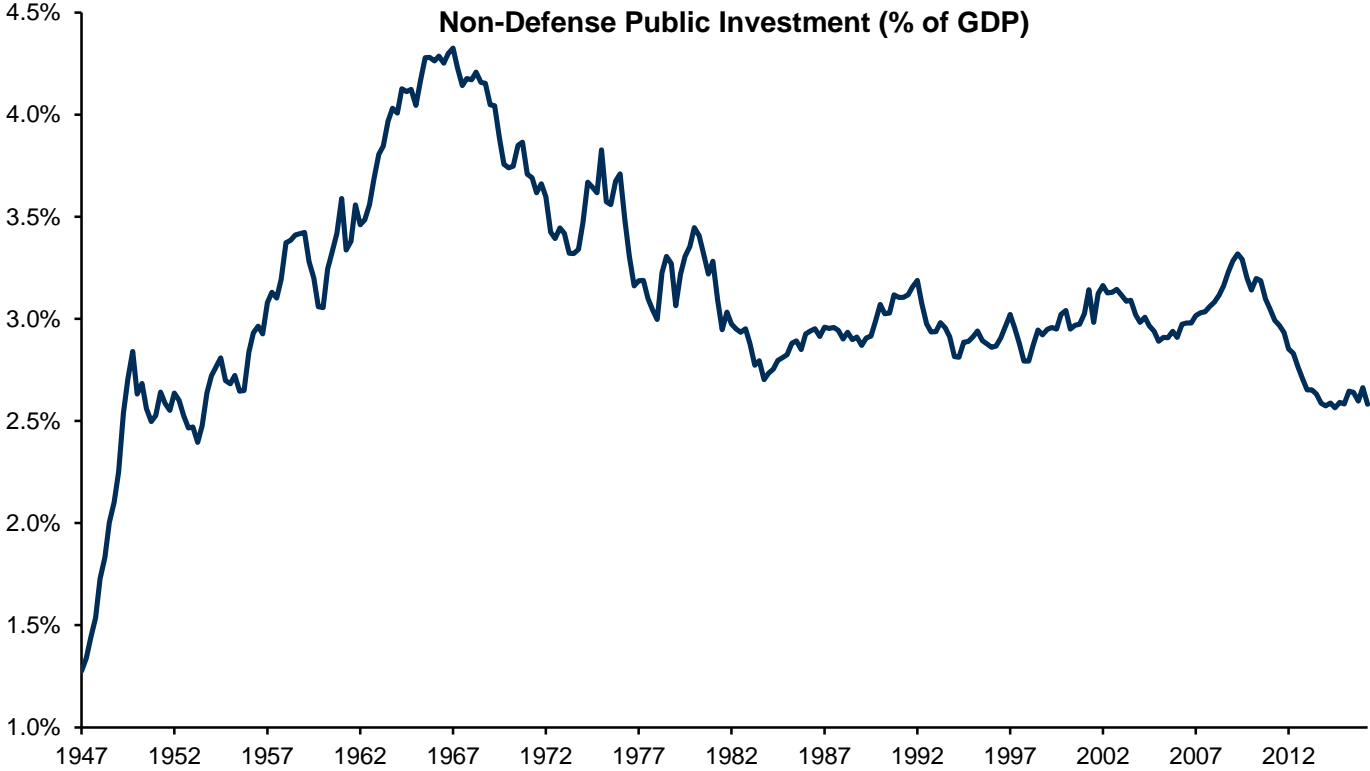
Source: Haver Analytics®, Credit Suisse

Aging Capital Stock I



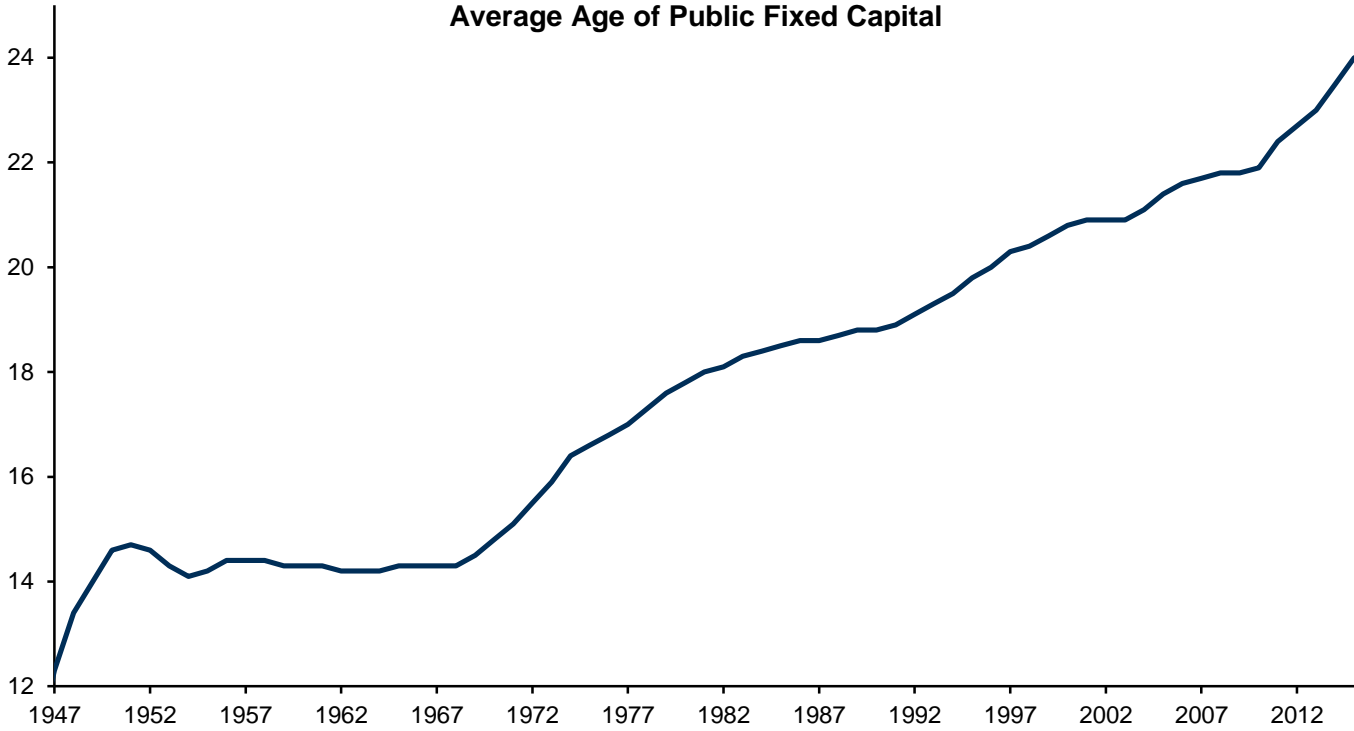
Source: Haver Analytics®, Credit Suisse

Aging Capital Stock II



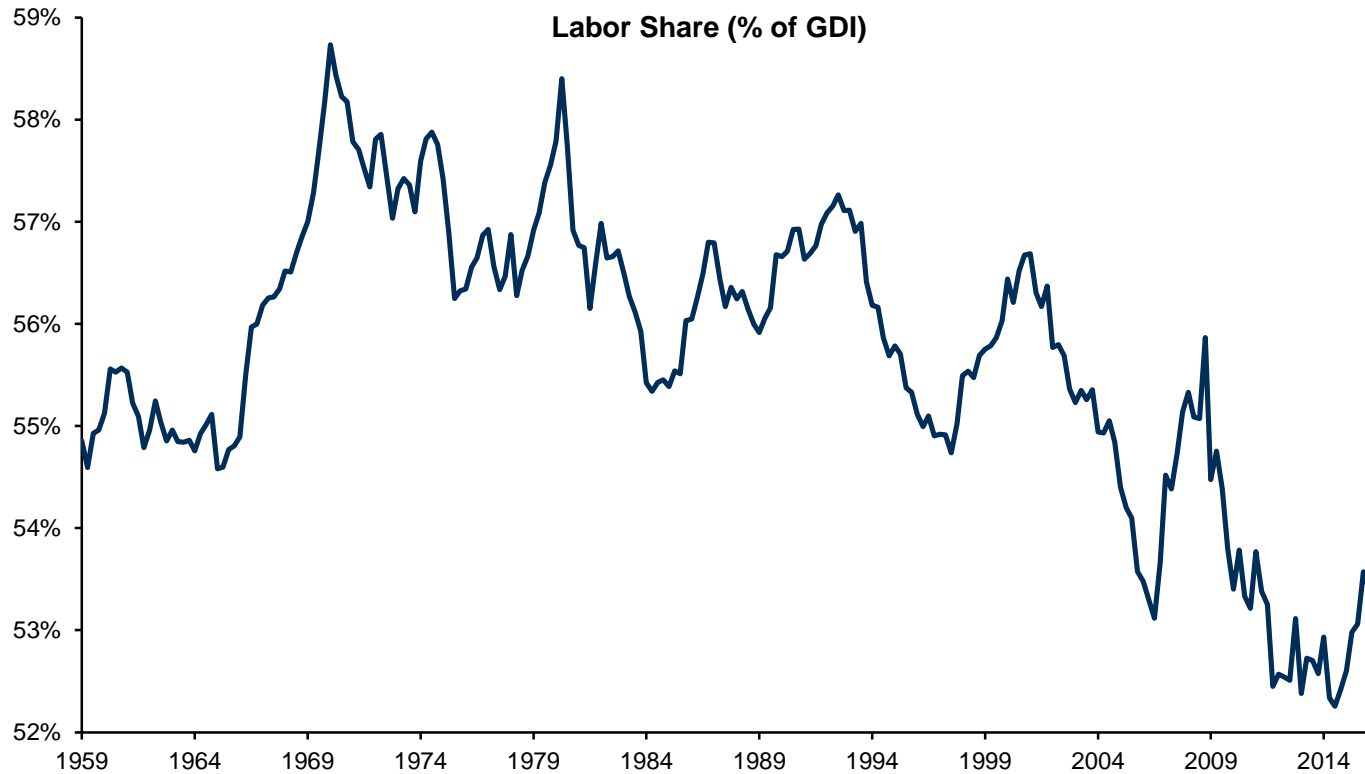
Source: Haver Analytics®, Credit Suisse

Aging Capital Stock III



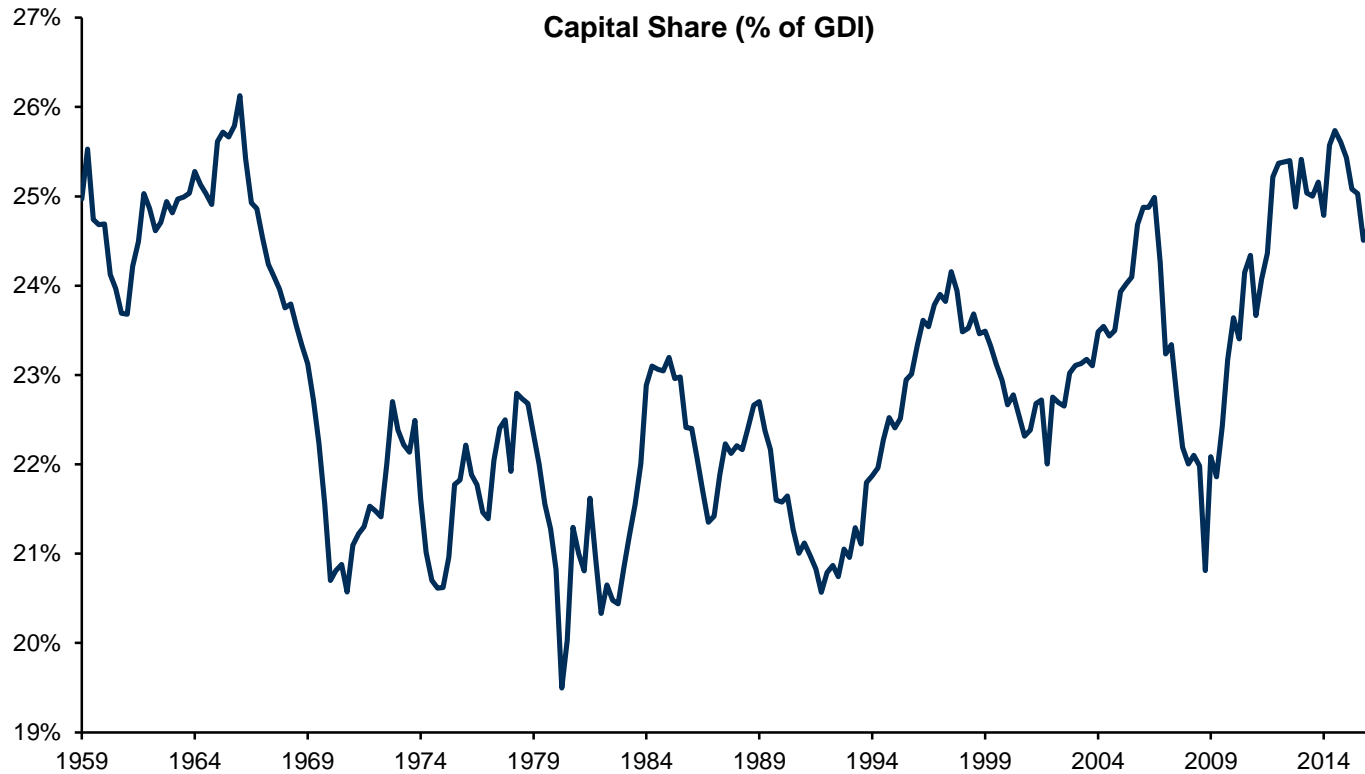
Source: Haver Analytics®, Credit Suisse

Distribution of the Gross Domestic Income I



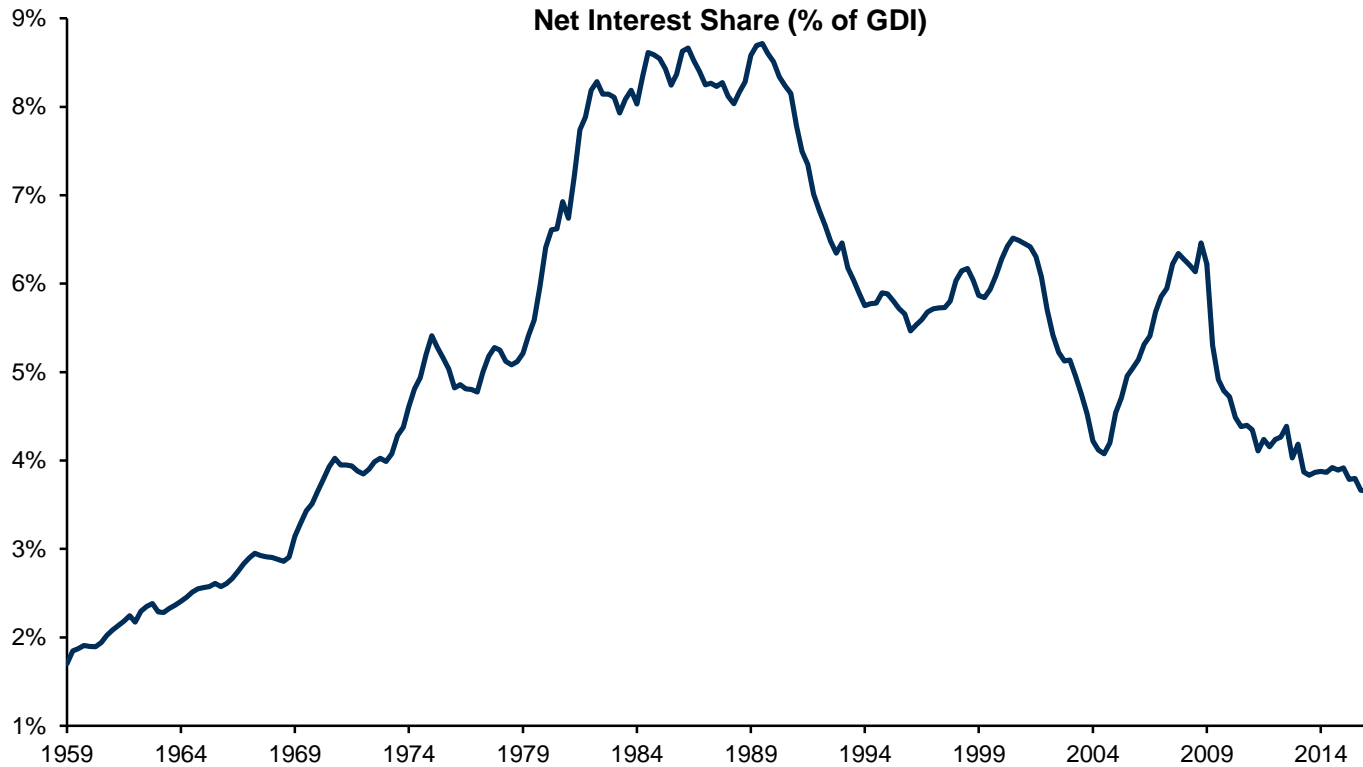
Source: Haver Analytics®, Credit Suisse

Distribution of the Gross Domestic Income II



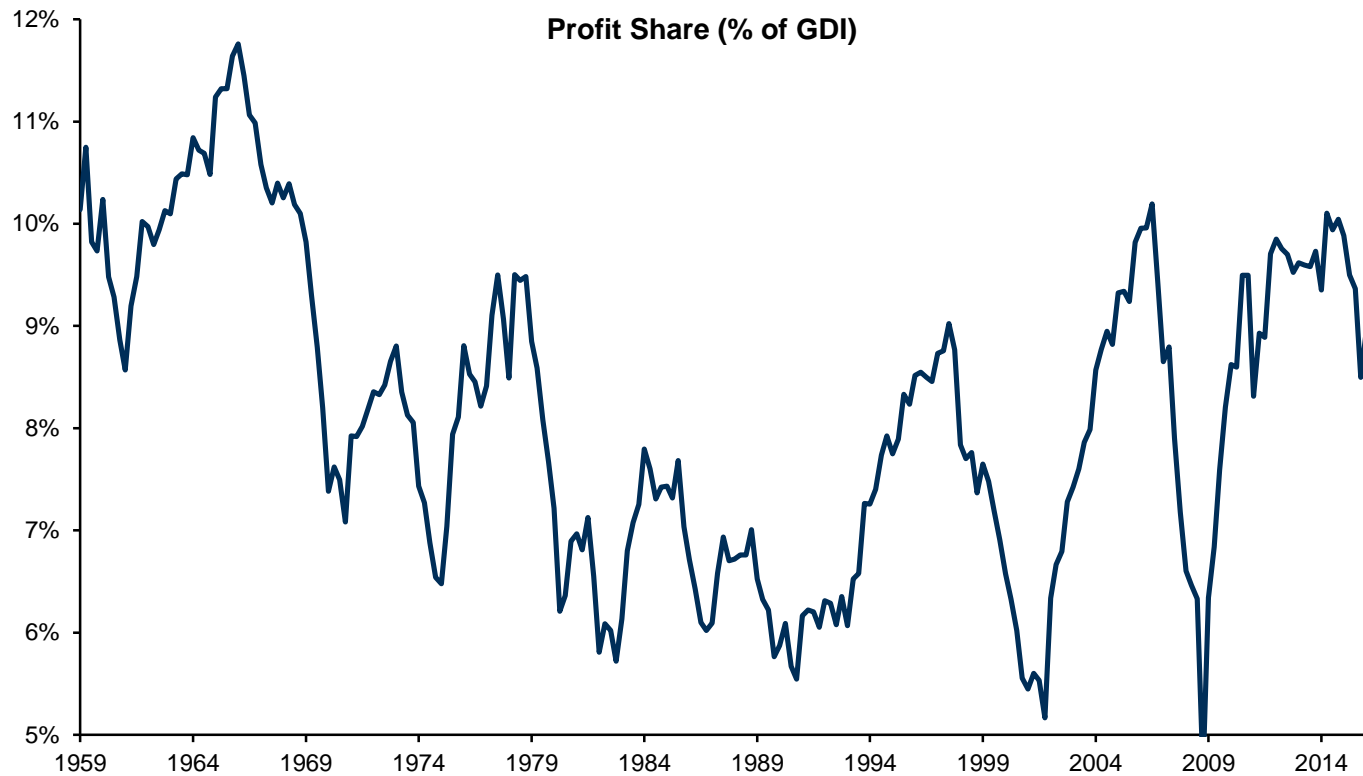
Source: Haver Analytics®, Credit Suisse

Distribution of the Gross Domestic Income III



Source: Haver Analytics®, Credit Suisse

Distribution of the Gross Domestic Income IV



Source: Haver Analytics®, Credit Suisse

And Now For Something
Completely Similar...
Which Turned Out
Very Different

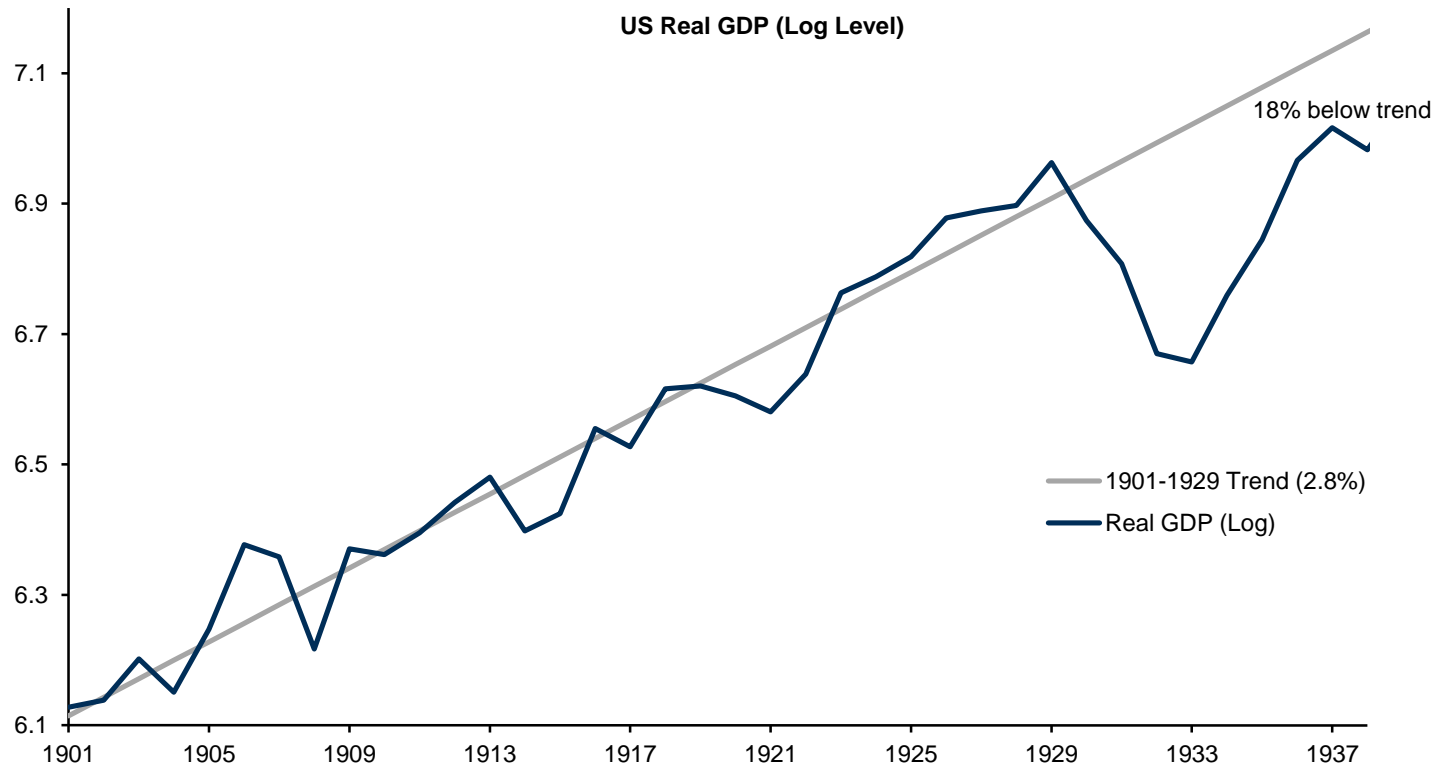
In December 1938, Alvin Hansen delivered his American Economic Association presidential address, entitled “Economic Progress and Declining Population Growth.”

The theme of this address became known as “secular stagnation.”

The concerns that led Professor Hansen to consider such a gloomy path sound familiar today, including

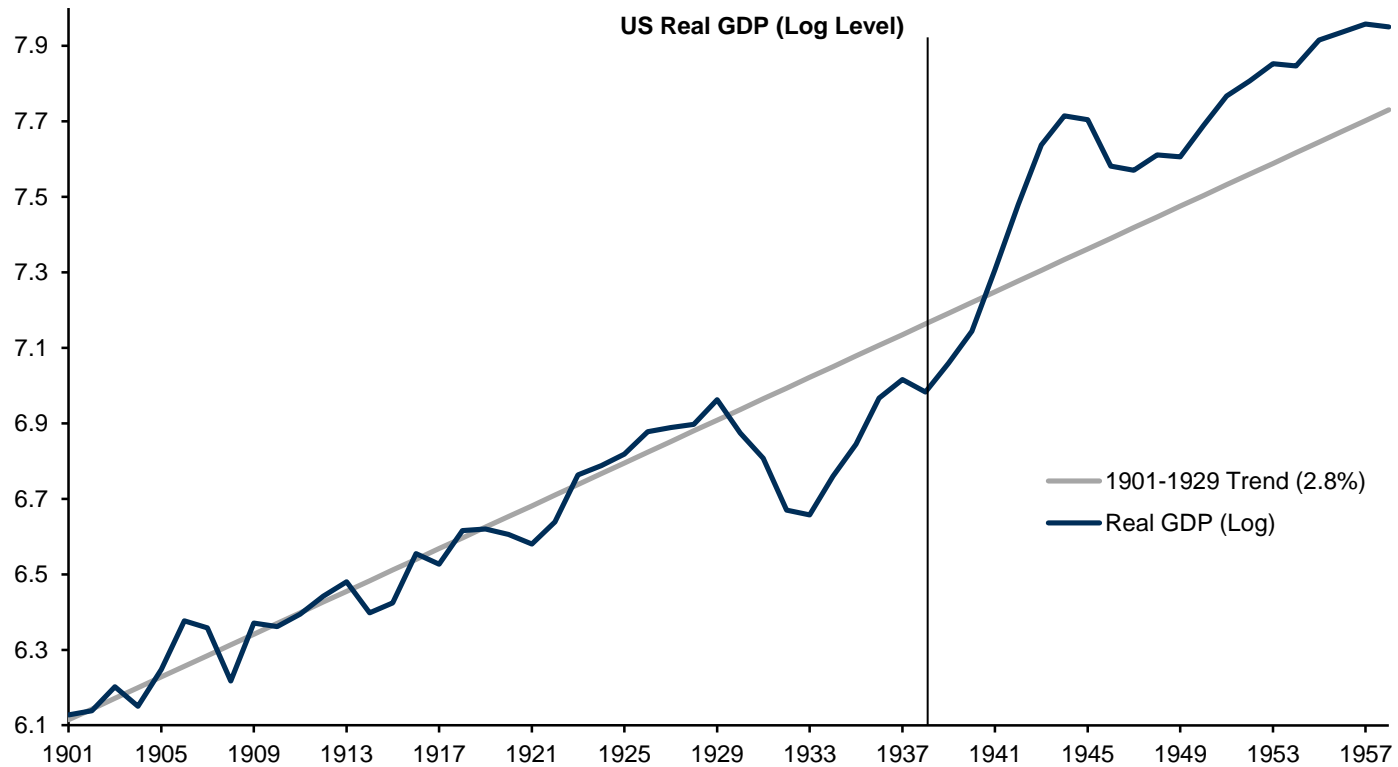
- Low population growth
- Aging
- Low interest rates
- Low investment
- Unequal income and wealth

US Real GDP (1901-1938)



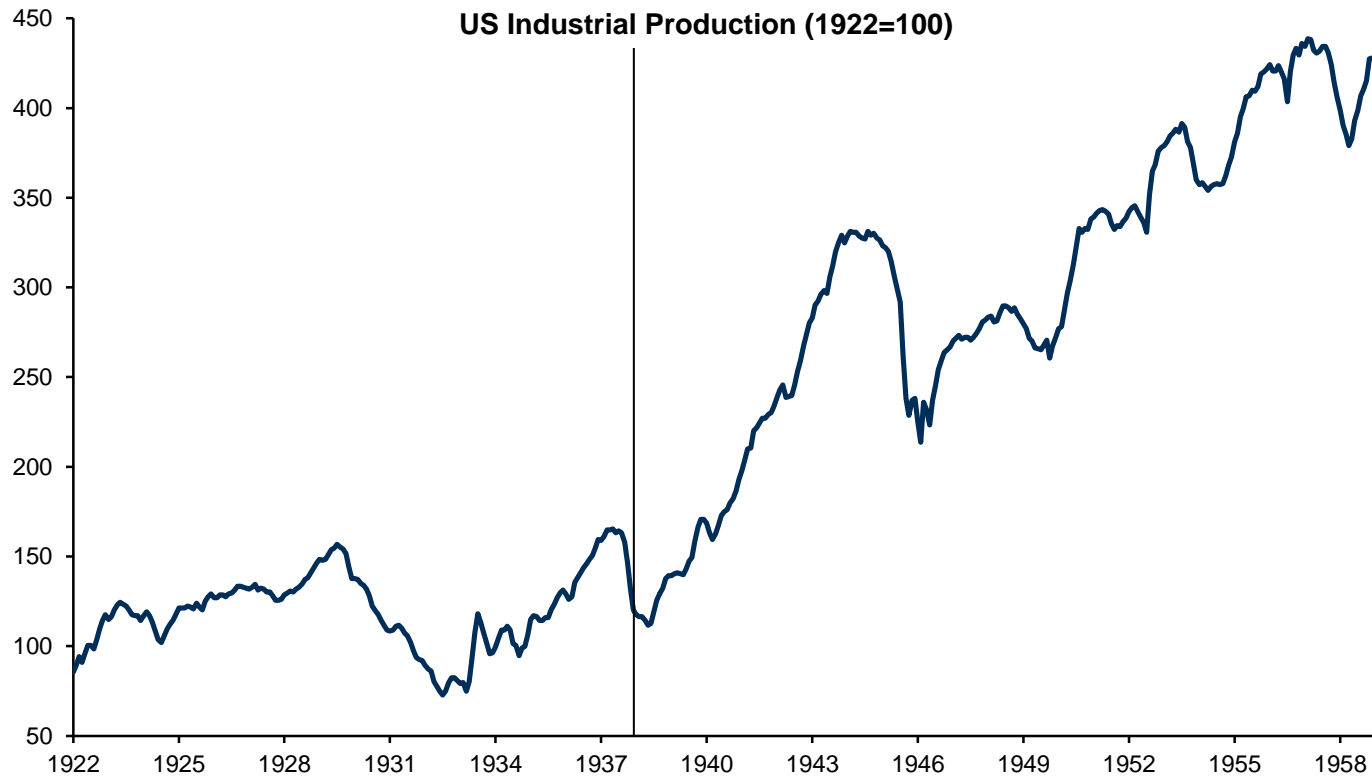
Source: Haver Analytics®, Credit Suisse

US Real GDP (1901-1958)



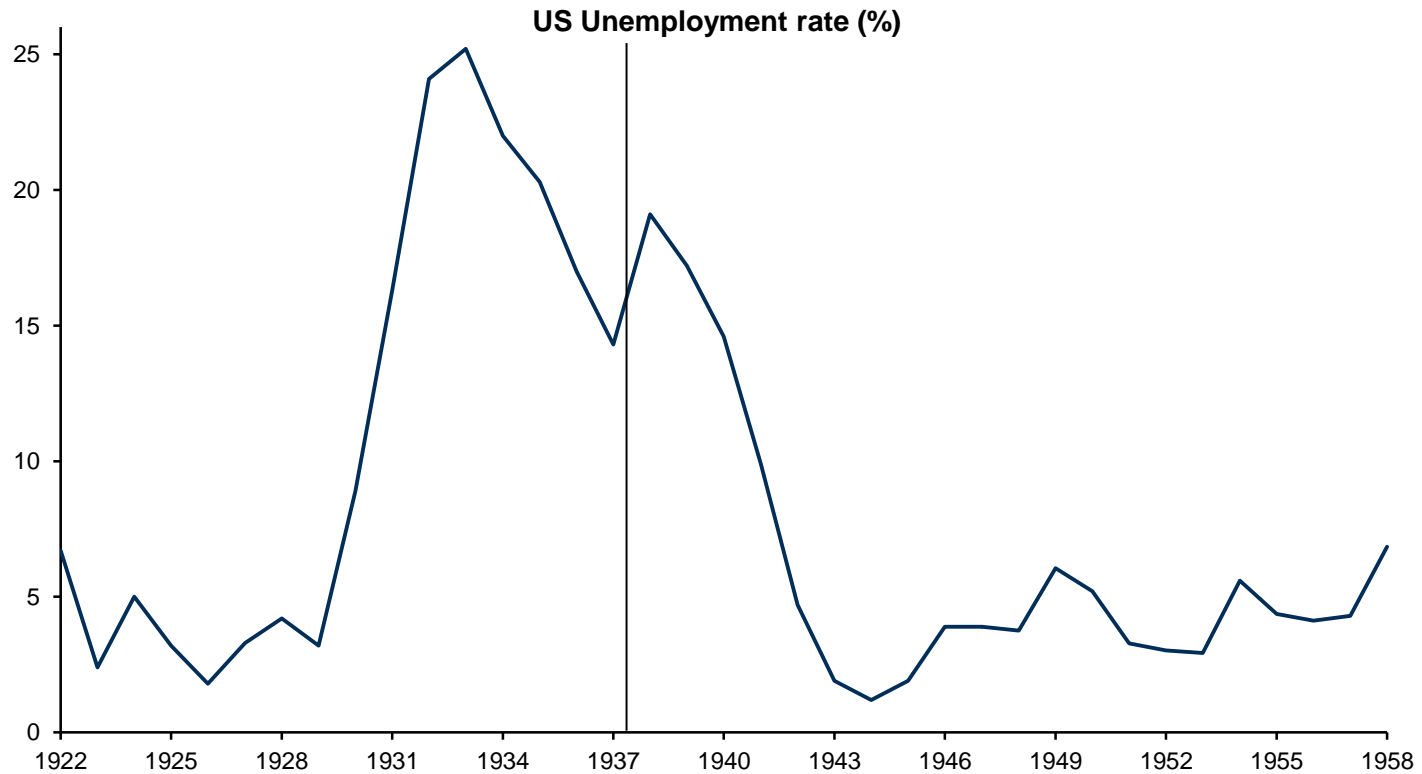
Source: Haver Analytics®, Credit Suisse

US Industrial Production (1922-1958)



Source: Haver Analytics®, Credit Suisse

US Unemployment Rate (1922-1958)



Source: Haver Analytics®, Credit Suisse

What Made Professor Hansen So Wrong?

FISCAL EFFORT

...On the Spending Side

Maybe Potential has a significant grounding on the demand side.

Using exercise as a metaphor, even though there is an absolute limit to what you can do, the more you exercise, the greater your capabilities.

Disclosure Appendix

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I, Neal Soss, certify that (1) the views expressed in this report accurately reflect my personal views about all of the subject companies and securities and (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

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