



COMMONWEALTH OF PUERTO RICO

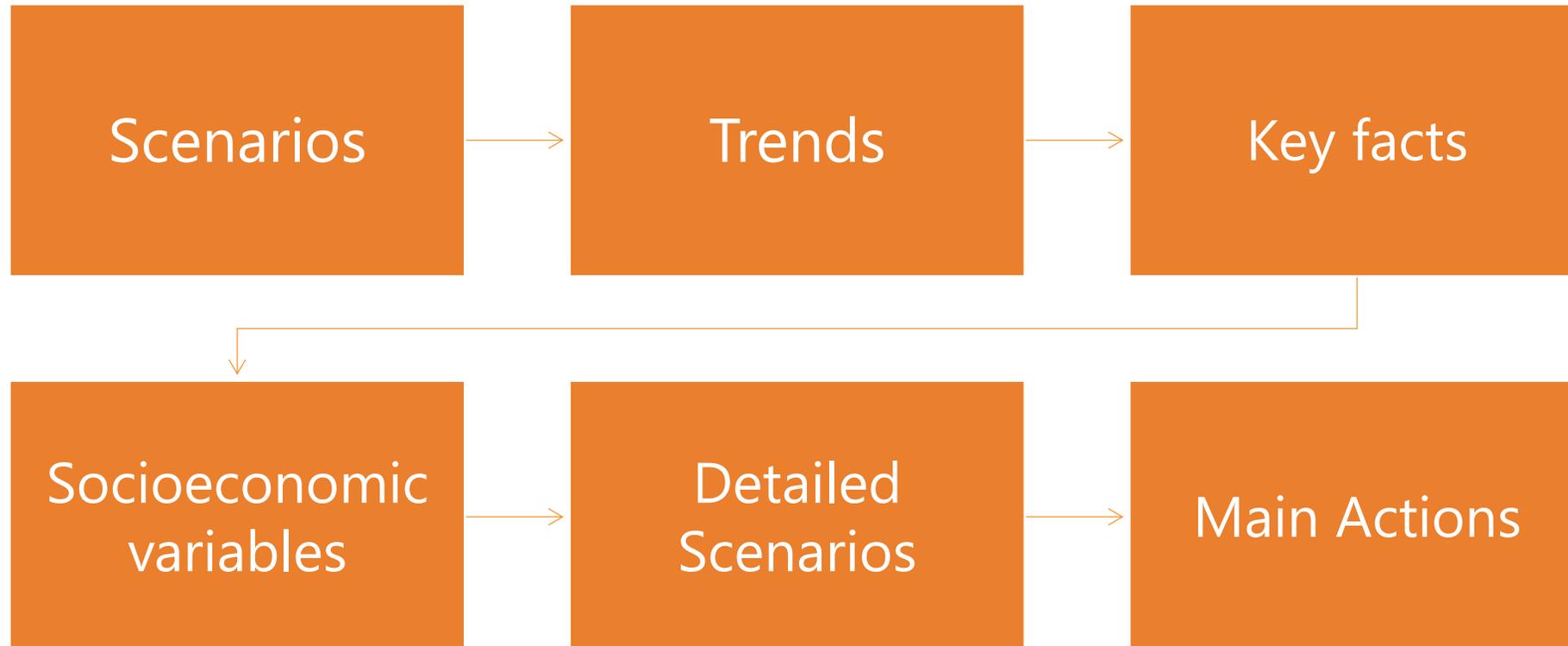
DEPARTMENT OF
**ECONOMIC DEVELOPMENT
& COMMERCE**

DDEC

Puerto Rico 2016 – 2030

September, 2016

PRESENTATION PLAN



SCENARIOS

The report provides a series of scenarios that will guide the future undertakings of our society and economy. Scenarios provide both, a temporal and a qualitative dimension. Three main time periods have been selected, illustrating short, medium and longer term perspectives. Also, potential outcomes were divided between baseline, optimistic and pessimistic views, in order to provide a broader range of strategies and recommendations.

Description of Scenarios by Time Period and Perspectives on Key Indicators
2016-2030

	2016-2020	2021-2025	2026-2030
Optimistic	Readjustment Period	On the Path to Recovery	Modest Growth
Base	Contraction Period	Critical Stabilization Period	On the Path to Recovery
Pessimistic	Lost Period	Readjustment Period	Stabilization Period

TRENDS

1 The Economy Will Be Smaller

In almost all of the scenarios, Puerto Rico will have a substantial downsizing in its demographic and economic base, with higher percentages of elderly population and a challenging labor market. Coupled with the starting point of a decade-long deep economic contraction, these changes will have multifaceted repercussions upon the economy. The major challenge remains designing institutions suitable for a context very different from the one that prevailed until fairly recently.

2 Policy Reforms Will Be Indispensable to Achieve Economic Growth

It is clear that for the short and medium term, uncertainty is the defining factor in Puerto Rico's economy. A large number of external and internal variables are subject to change, and there remains a desperate need for policy and institutional reforms to address long-standing structural weaknesses in the economy.

TRENDS

3 Fixed Capital Investment Will Have to Increase

If we assume the total requirements of fixed capital investment in the island to be the average during fiscal years 2000 to 2004 (27.9%), we find that none of our scenarios point to an increase in the GFCI share anywhere near that level. In fact, the highest real share of GFCI to GNP in our scenarios was 18% by 2030.

What could change the above conclusion is an **aggressive program of infrastructure rehabilitation** and a **successful promotion program for new economic activities**.

4 The Recovery Path Will Likely Take Longer than 2030

Even with economic reforms in place, the path to recovery is expected to take more than 15 years. This is the result of an exercise conducted to determine the approximate time period during which a scenario would attain a non-recessionary level of economic output.

KEY FACTS

1

In a general sense, the **economy will undergo several profound transitions during the period 2016-2030** that are dependent upon institutional, demographic and, of course, economic variables, both internal and external.

2

The baseline scenario contemplates a continued **contraction** in the years 2016 to 2020, followed by **stabilization** from 2021 to 2025 and finally resuming a **growth path** from 2026 to 2030.

3

The baseline scenario contemplates a continued contraction in the years 2016 to 2020, followed by stabilization from 2021 to 2025 and finally resuming a growth path from 2026 to 2030.

4

GNP growth will fluctuate from an average decline of between 1.4% and 2.2% for the 2016-2020 period to growth between 1.0% and 3.4% for the 2026-2030 period.

5

Employment in mid-level wage occupations has declined, whereas employment in higher-wage occupations has been increasing, particularly jobs in computer and mathematics related occupations.

KEY FACTS

6

The expected challenges in the labor market and changing occupation structures in labor demand place much greater emphasis upon lifelong learning and increasing individual skills.

7

Various policy reforms and economic initiatives are assumed to be implemented at different times in the scenarios, as these are recognized as necessary to shift the economy away from the spiral of economic contraction, emigration and job loss.

8

Assuming the total requirements of fixed capital investment in the island to be the average during fiscal years 2000 to 2004 (27.9%), none of our scenarios point to an increase in the Growth Fixed Capital Investment (GFCI) share anywhere near that level. The highest share of GFCI to GNP was 18% by 2030. The potential growth of our economy will continue to be led by consumption and government expenditures even by 2030, as infrastructure requirements will not be fully met.

9

Even with economic reforms in place, the growth path for Puerto Rico's economy is likely to take longer than 2030 to achieve full recovery. Only in the optimistic scenario does the economy return to the GNP level in fiscal 2006, the last pre-recessionary year. In the pessimistic scenario, economic growth to fiscal 2006 levels is not expected until 2041, shifting the growth period by more than a decade with respect to 2030. For the baseline scenario, parity with the 2006 GNP level is achieved in 2034.

SOCIOECONOMIC VARIABLES: 2016-2030

- Variables are presented in terms of percentage points for each scenario, with the exception of total population.
- The 2016 – 2030 period highlights an economy much different than previous years (2006 – 2015). Yet, the 2016 – 2020 seems as a transitional period to deeper changes in 2021 and onward.

Comparison of Key Indicators Across Time Periods -- Optimistic Scenario

Fiscal Years -- 2006 - 2030

Variable	Period			
	2006-2015	2016-2020	2021-2025	2026-2030
Population (End of Period)	3,505,000	3,308,045	3,266,901	3,300,194
Gross National Product (Growth)	-1.5%	-1.4%	2.2%	3.4%
Personal Consumption Expenditures (Growth)	0.2%	-1.0%	1.3%	1.8%
Investment (Growth):	-3.6%	-2.4%	1.3%	2.9%
Public Construction	-9.0%	-4.9%	3.1%	2.9%
Private Construction	-8.0%	-3.3%	1.9%	3.1%
Machinery & Equipment	-0.5%	-1.9%	1.0%	2.8%
Government Expenditures (Growth)	-1.2%	-1.0%	1.0%	1.7%
Employment (End of Period)	984.0	940.5	966.7	1,008.4
Unemployment Rate	13.3	12.2	11.1	10.8
Labor Participation Rate	39.9	38.9	40.5	42.9

Comparison of Key Indicators Across Time Periods -- Baseline Scenario

Fiscal Years -- 2006 - 2030

Variable	Period			
	2006-2015	2016-2020	2021-2025	2026-2030
Population (End of Period)	3,505,000	3,283,022	3,161,742	3,145,964
Gross National Product (Growth)	-1.5%	-1.8%	1.1%	1.9%
Personal Consumption Expenditures (Growth)	0.2%	-1.5%	1.0%	1.3%
Investment (Growth):	-3.6%	-3.8%	0.5%	2.4%
Public Construction	-9.0%	-6.7%	2.6%	1.8%
Private Construction	-8.0%	-4.4%	1.2%	2.5%
Machinery & Equipment	-0.5%	-3.3%	0.1%	2.4%
Government Expenditures (Growth)	-1.2%	-2.9%	0.3%	1.6%
Employment (End of Period)	984.0	930.1	932.9	962.3
Unemployment Rate	13.3	14.3	13.6	11.9
Labor Participation Rate	39.9	39.2	39.4	42.1

Comparison of Key Indicators Across Time Periods -- Pessimistic Scenario

Fiscal Years -- 2006 - 2030

Variable	Period			
	2006-2015	2016-2020	2021-2025	2026-2030
Population (End of Period)	3,505,000	3,203,964	2,961,732	2,926,361
Gross National Product (Growth)	-1.5%	-2.2%	-1.1%	1.0%
Personal Consumption Expenditures (Growth)	0.2%	-1.7%	-0.9%	0.9%
Investment (Growth):	-3.6%	-4.8%	-1.9%	1.3%
Public Construction	-9.0%	-7.2%	-2.8%	1.1%
Private Construction	-8.0%	-6.0%	-2.8%	2.1%
Machinery & Equipment	-0.5%	-4.2%	-1.6%	1.1%
Government Expenditures (Growth)	-1.2%	-4.0%	-1.1%	1.2%
Employment (End of Period)	984.0	917.0	903.3	911.1
Unemployment Rate	13.3	15.0	14.9	14.3
Labor Participation Rate	39.9	37.9	37.0	38.1

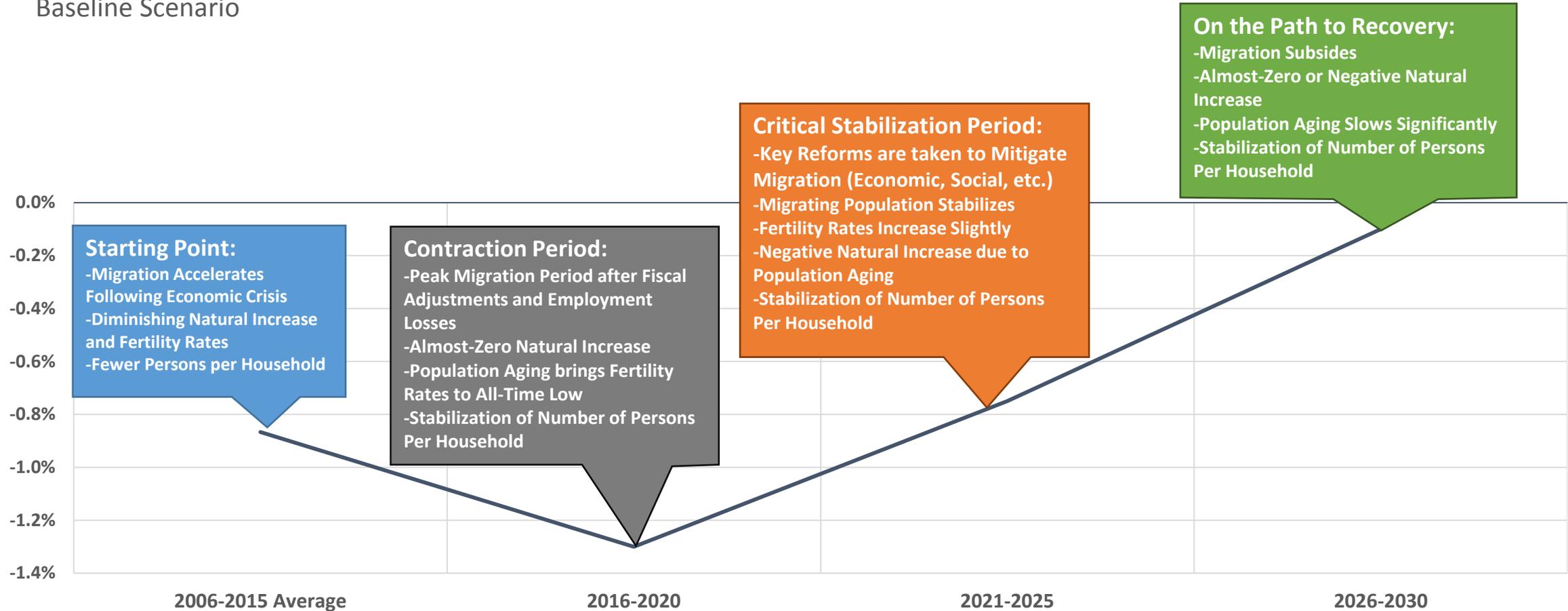


DETAILED SCENARIOS: POPULATION

DETAILED SCENARIOS: POPULATION

Key Scenarios for Population Growth -- 2016 - 2030

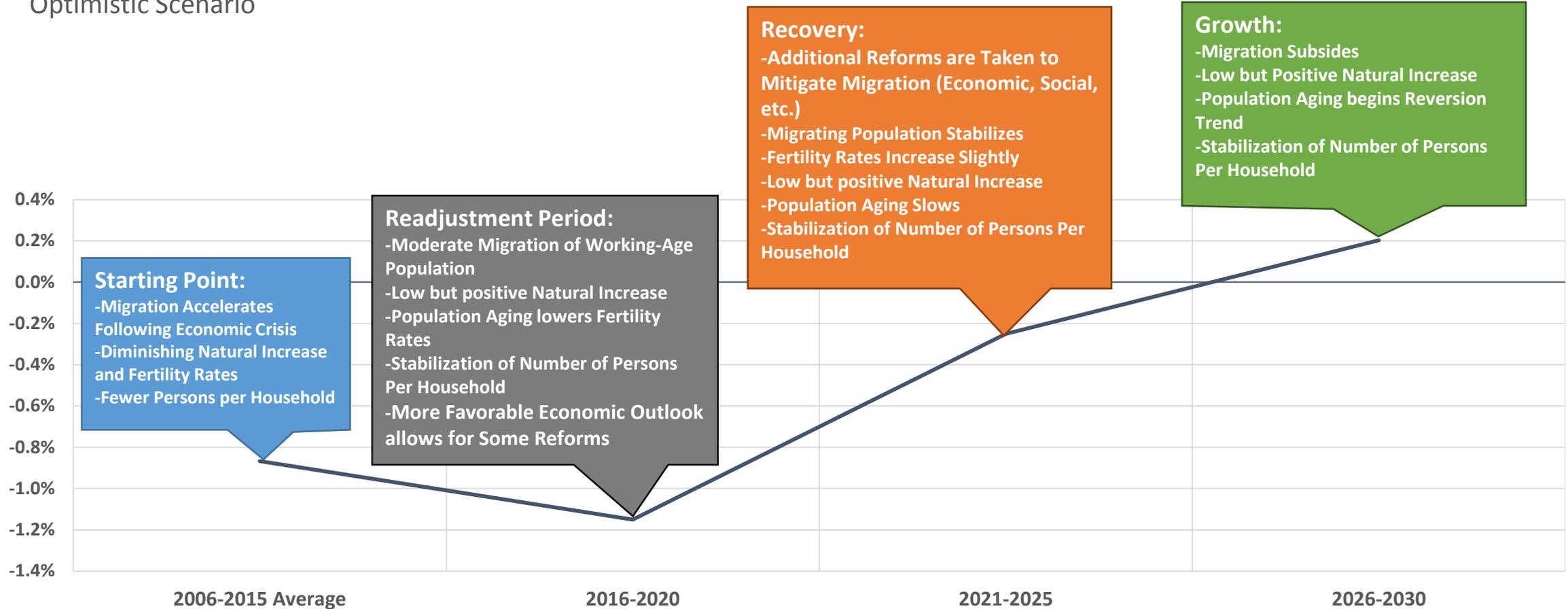
Baseline Scenario



DETAILED SCENARIOS: POPULATION

Key Scenarios for Population Growth -- 2016 - 2030

Optimistic Scenario

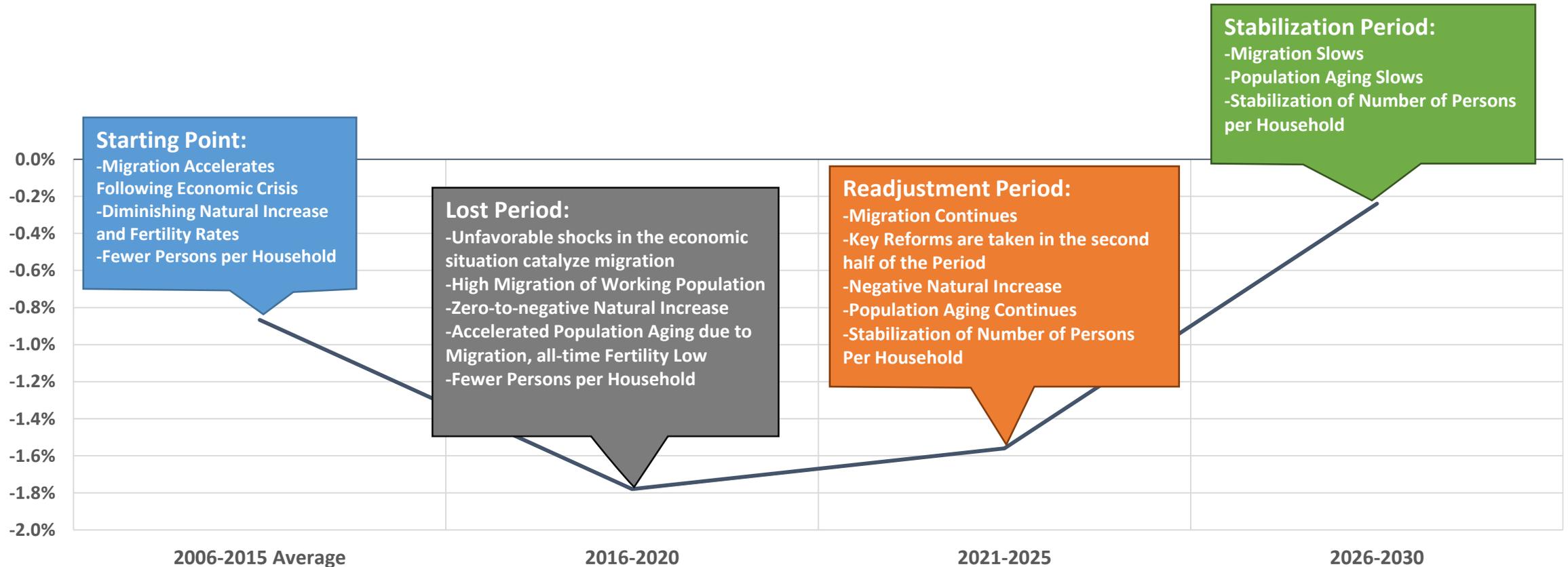


DETAILED SCENARIOS: POPULATION

Key Scenarios for Population Growth -- 2016 - 2030

Pessimistic Scenario

PESSIMISTIC



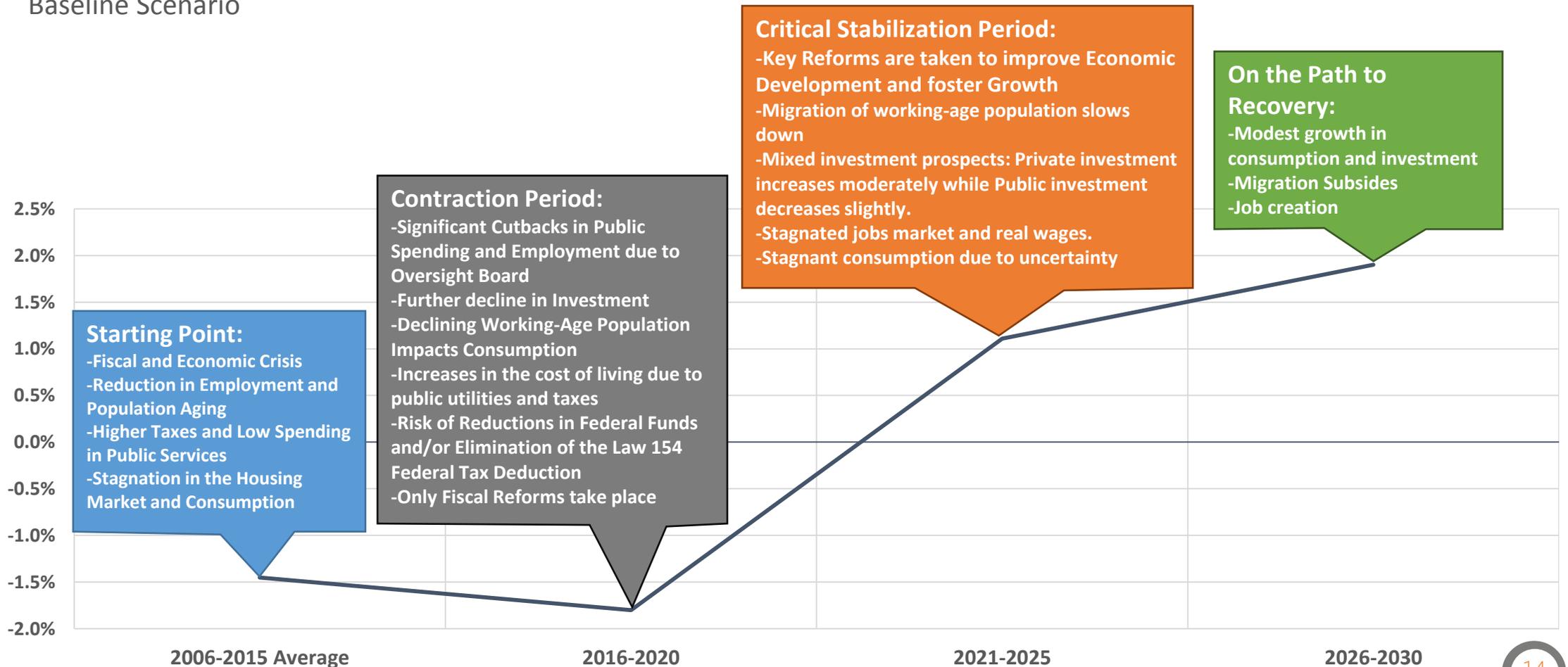


DETAILED SCENARIOS: GNP GROWTH

DETAILED SCENARIOS: GNP GROWTH

Key Scenarios for GNP Growth -- 2016 - 2030

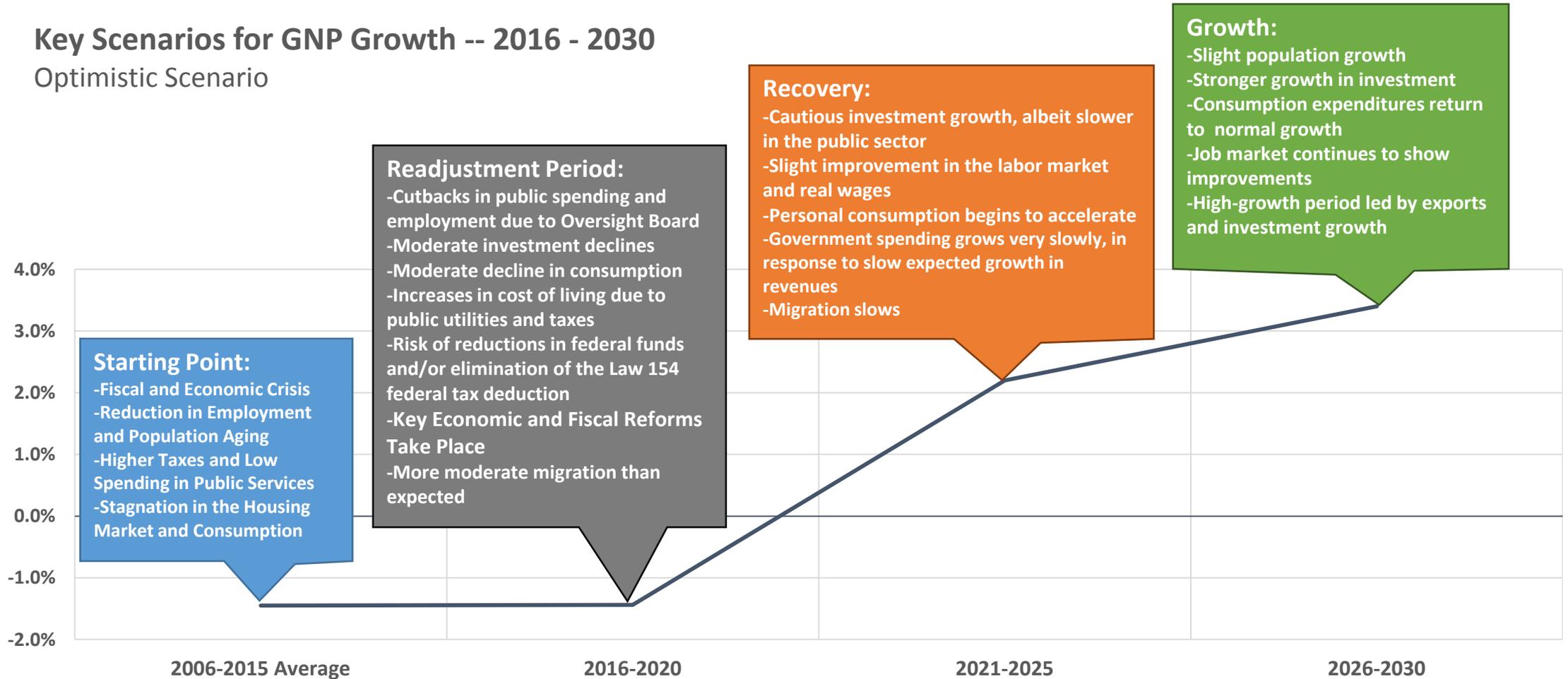
Baseline Scenario



DETAILED SCENARIOS: GNP GROWTH

Key Scenarios for GNP Growth -- 2016 - 2030

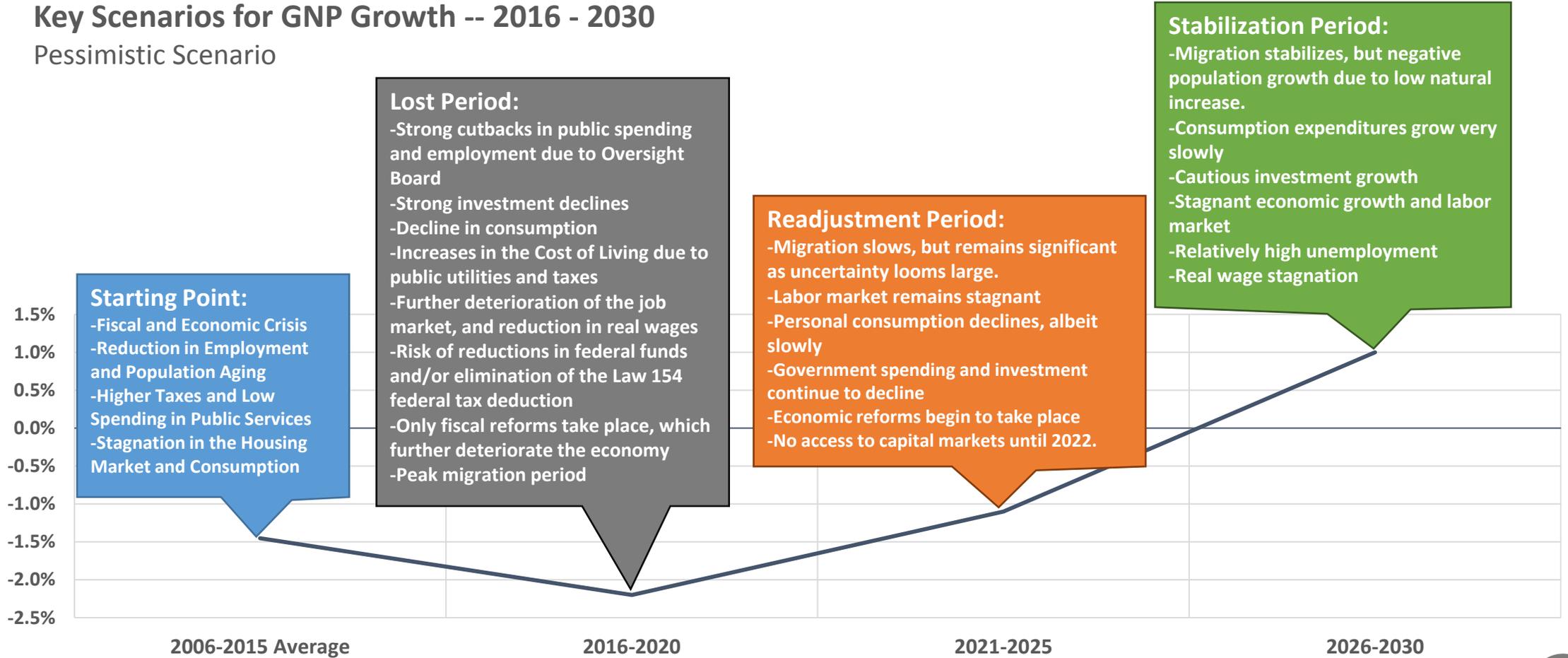
Optimistic Scenario



DETAILED SCENARIOS: GNP GROWTH

Key Scenarios for GNP Growth -- 2016 - 2030

Pessimistic Scenario



PESSIMISTIC

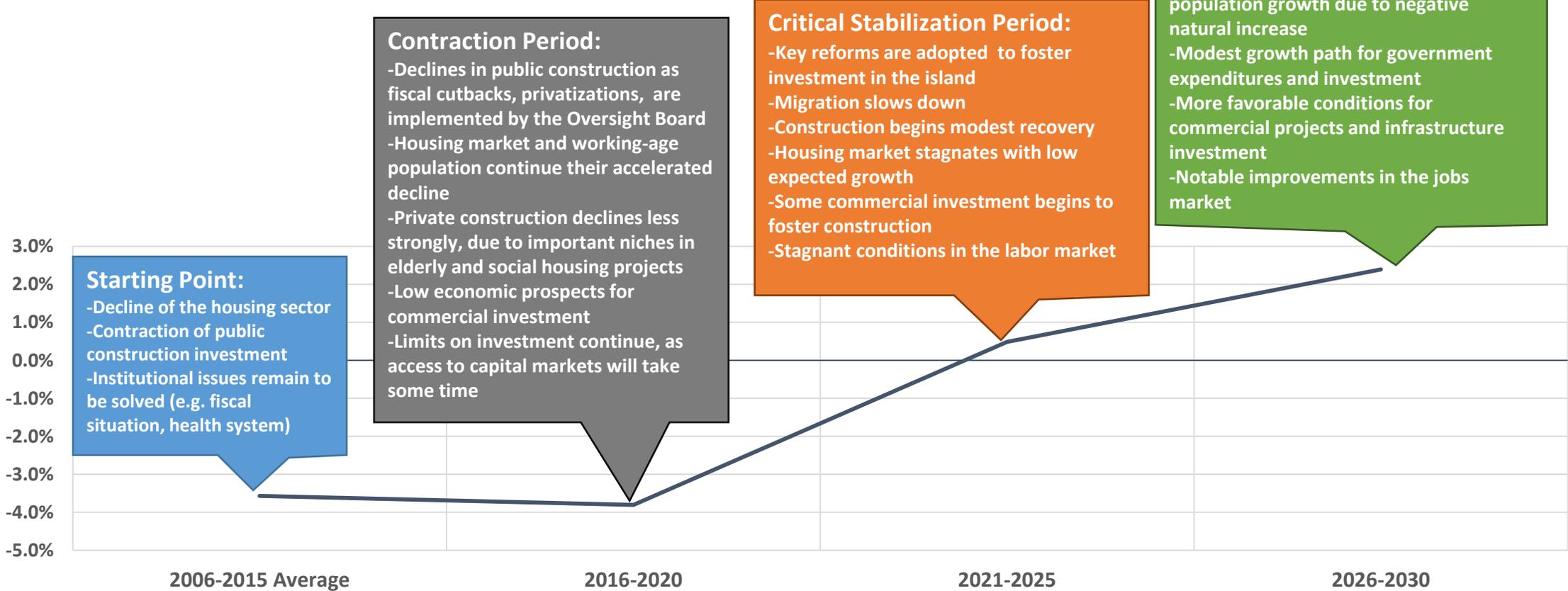


DETAILED SCENARIOS: INVESTMENT

DETAILED SCENARIOS: INVESTMENT

Key Scenarios for Investment -- 2016 - 2030

Baseline Scenario

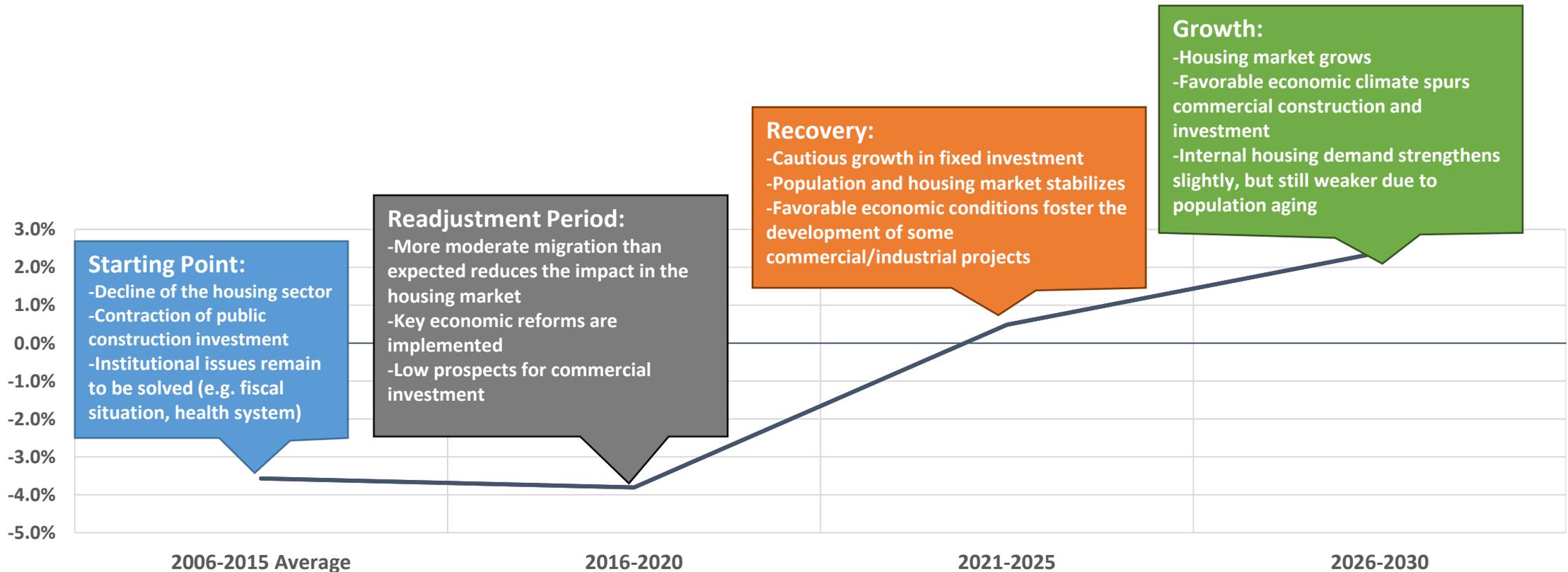


BASELINE

DETAILED SCENARIOS: INVESTMENT

Key Scenarios for Investment -- 2016 - 2030

Optimistic Scenario

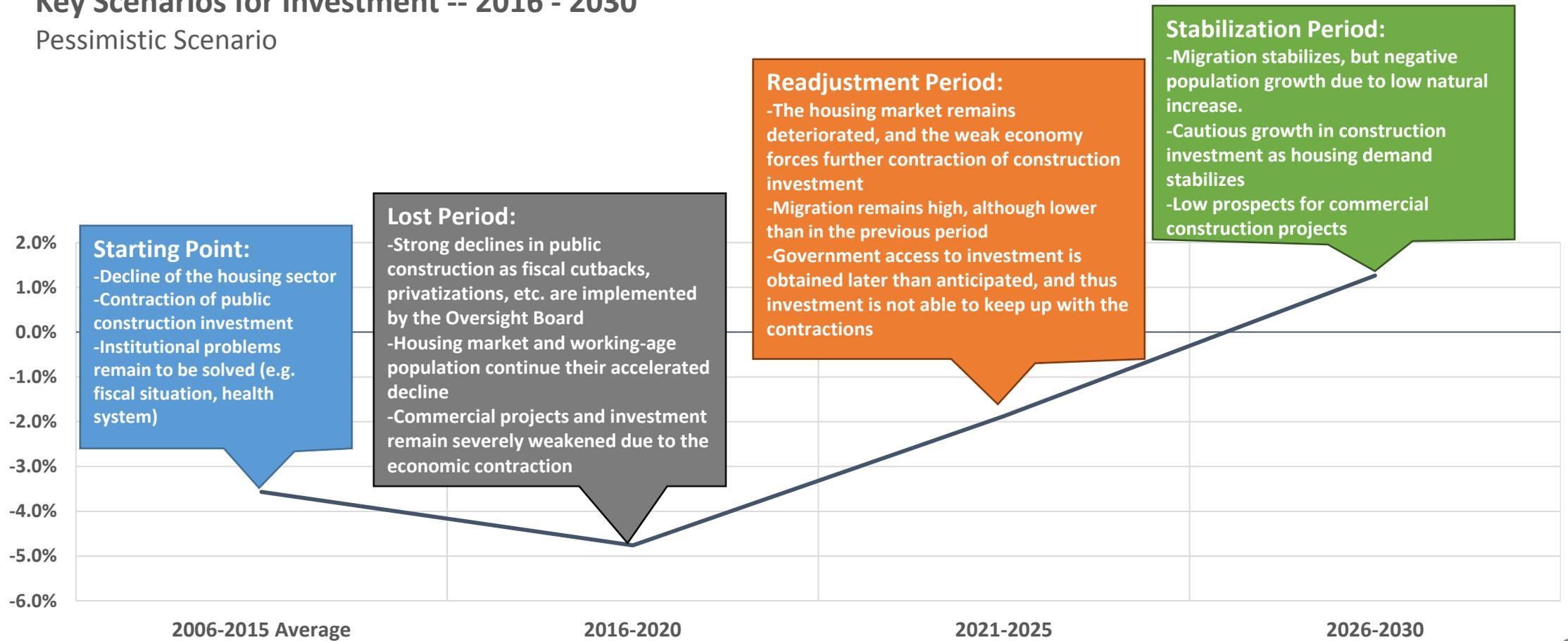


OPTIMISTIC

DETAILED SCENARIOS: INVESTMENT

Key Scenarios for Investment -- 2016 - 2030

Pessimistic Scenario



PESSIMISTIC

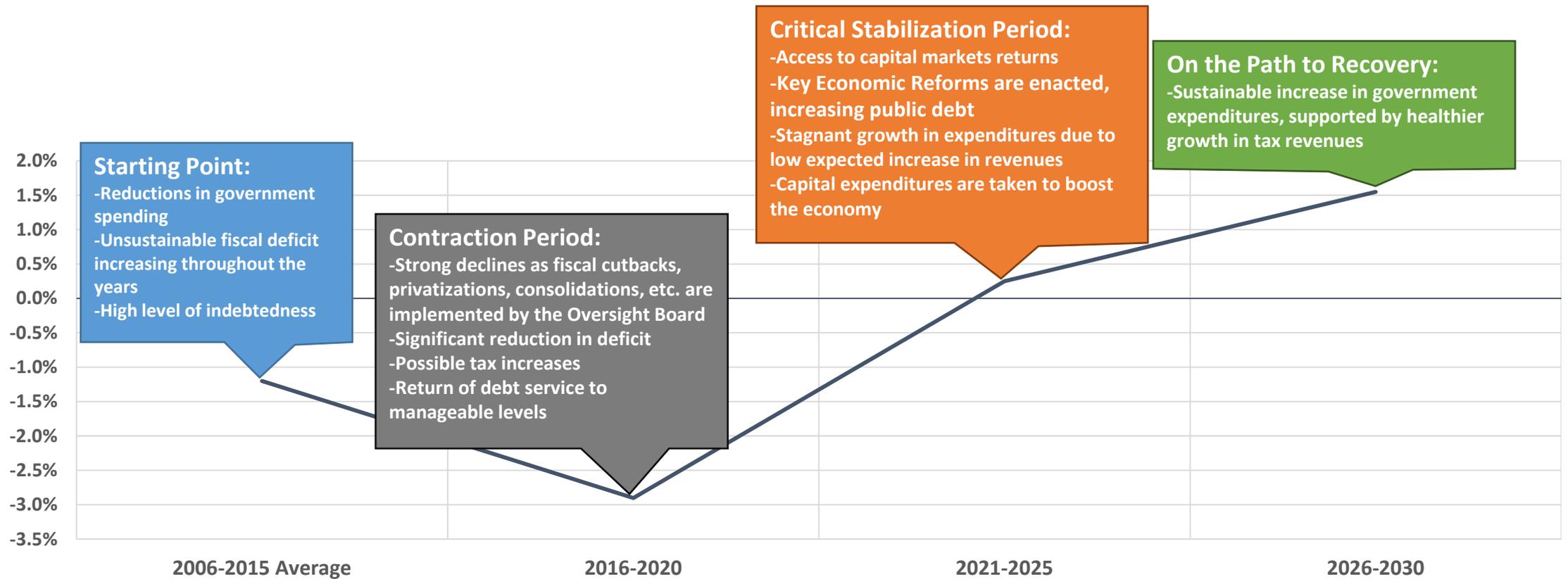


DETAILED SCENARIOS: GOVERNMENT SPENDING

DETAILED SCENARIOS: GOVERNMENT SPENDING

Key Scenarios for Government Spending -- 2016 - 2030

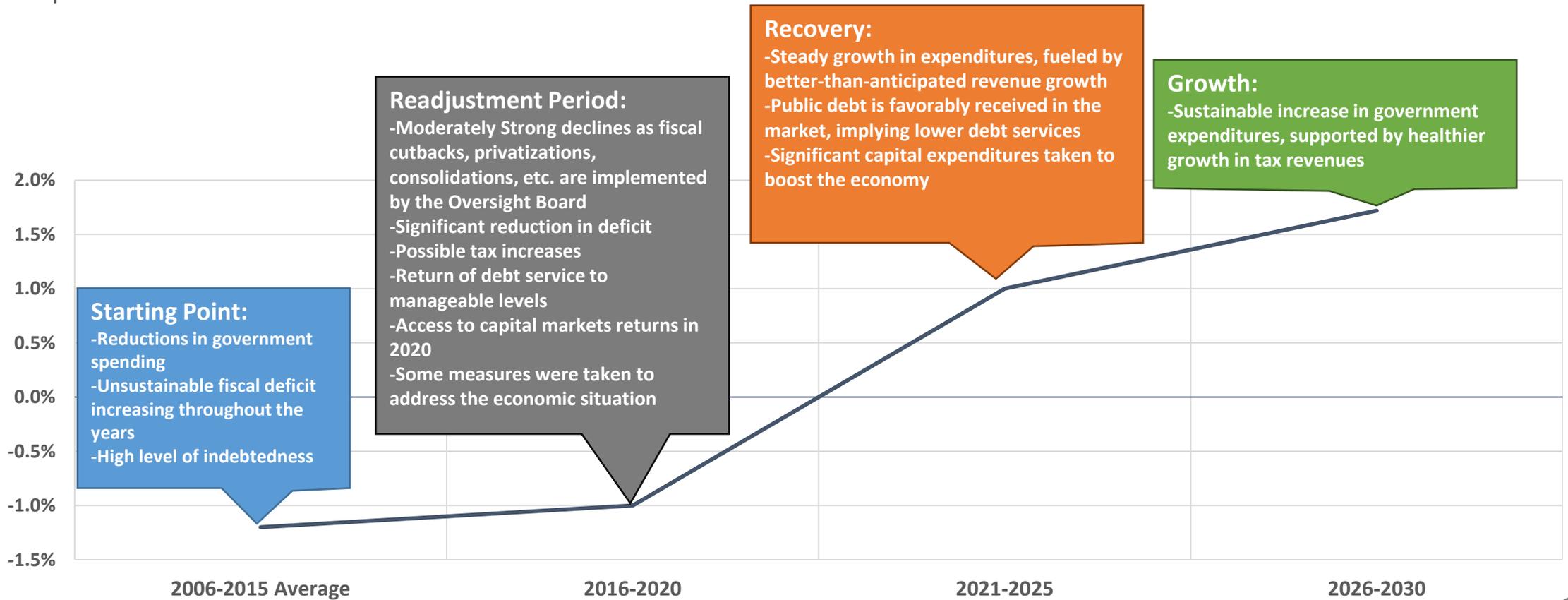
Baseline Scenario



DETAILED SCENARIOS: GOVERNMENT SPENDING

Key Scenarios for Government Spending -- 2016 - 2030

Optimistic Scenario

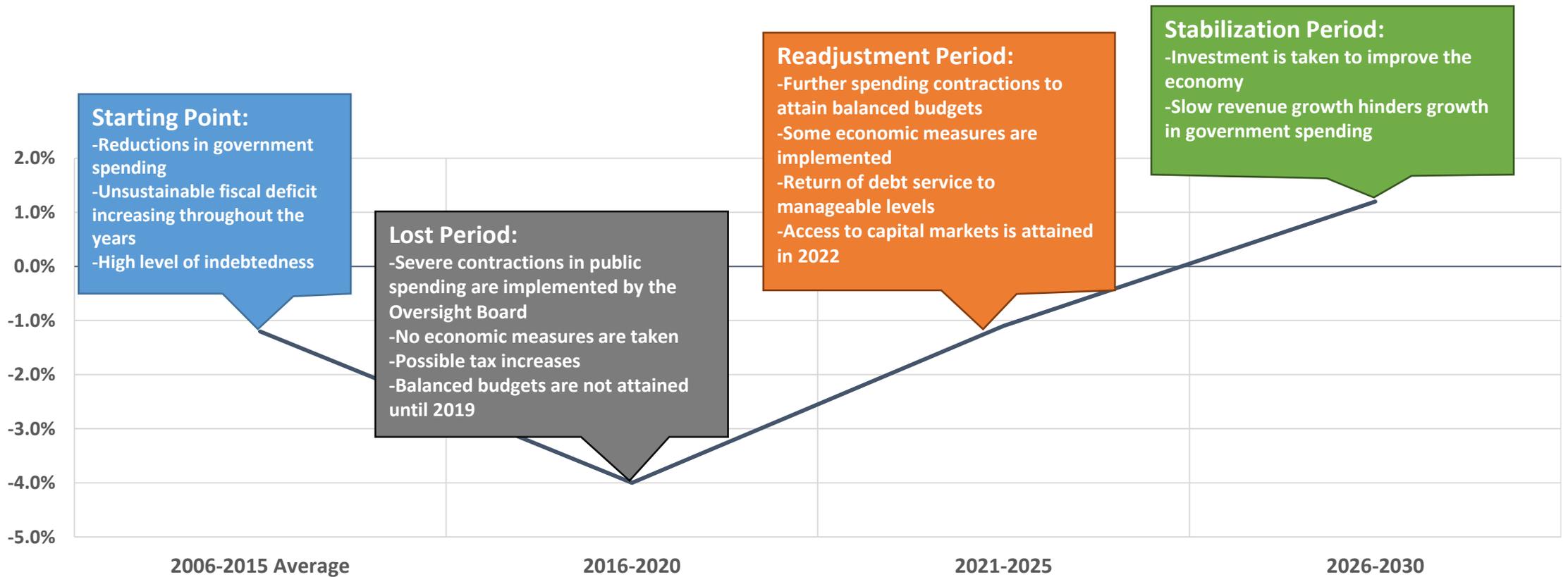


OPTIMISTIC

DETAILED SCENARIOS: GOVERNMENT SPENDING

Key Scenarios for Government Spending -- 2016 - 2030

Pessimistic Scenario



PESSIMISTIC

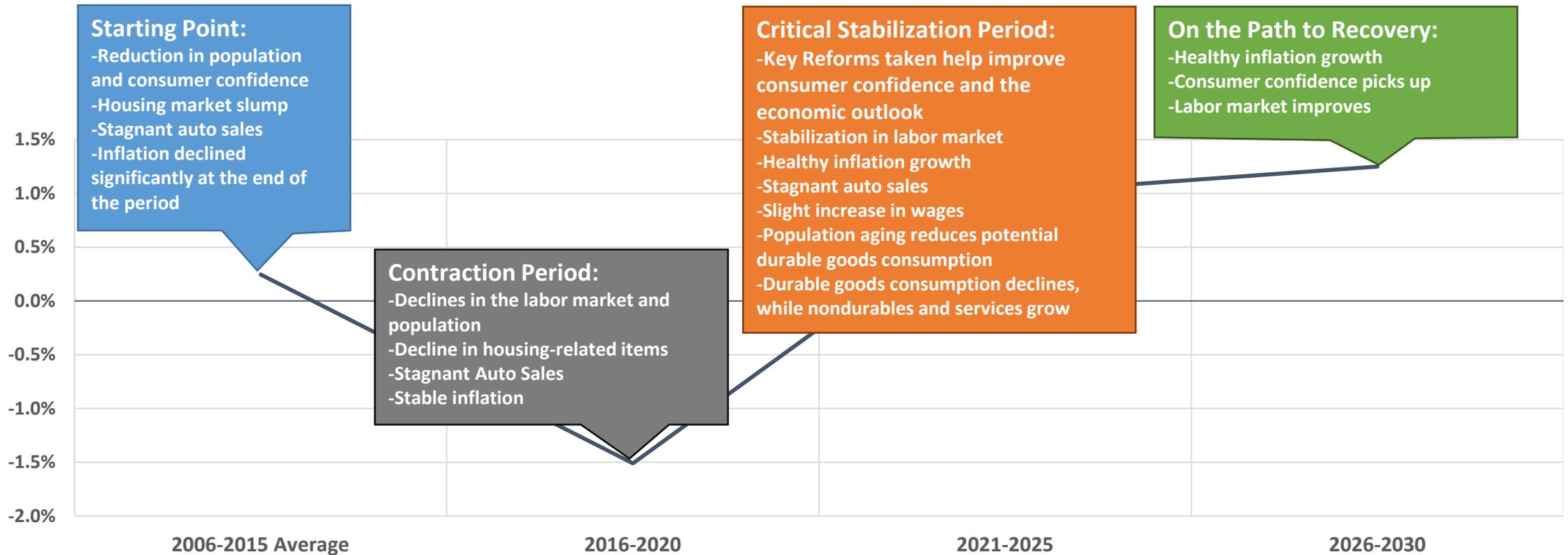


DETAILED SCENARIOS: PERSONAL CONSUMPTION EXPENDITURES

DETAILED SCENARIOS: PERSONAL CONSUMPTION EXPENDITURES

Key Scenarios for Personal Consumption Expenditures -- 2016 - 2030

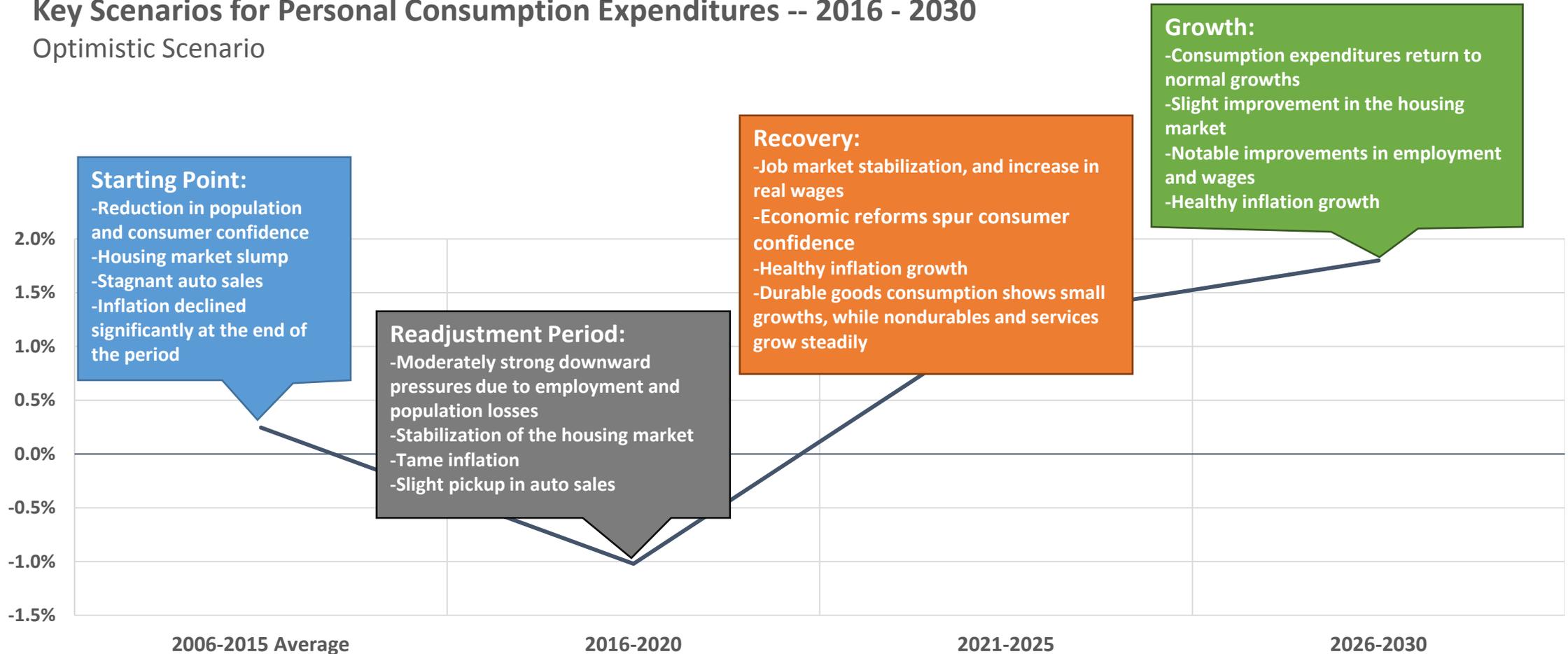
Baseline Scenario



DETAILED SCENARIOS: PERSONAL CONSUMPTION EXPENDITURES

Key Scenarios for Personal Consumption Expenditures -- 2016 - 2030

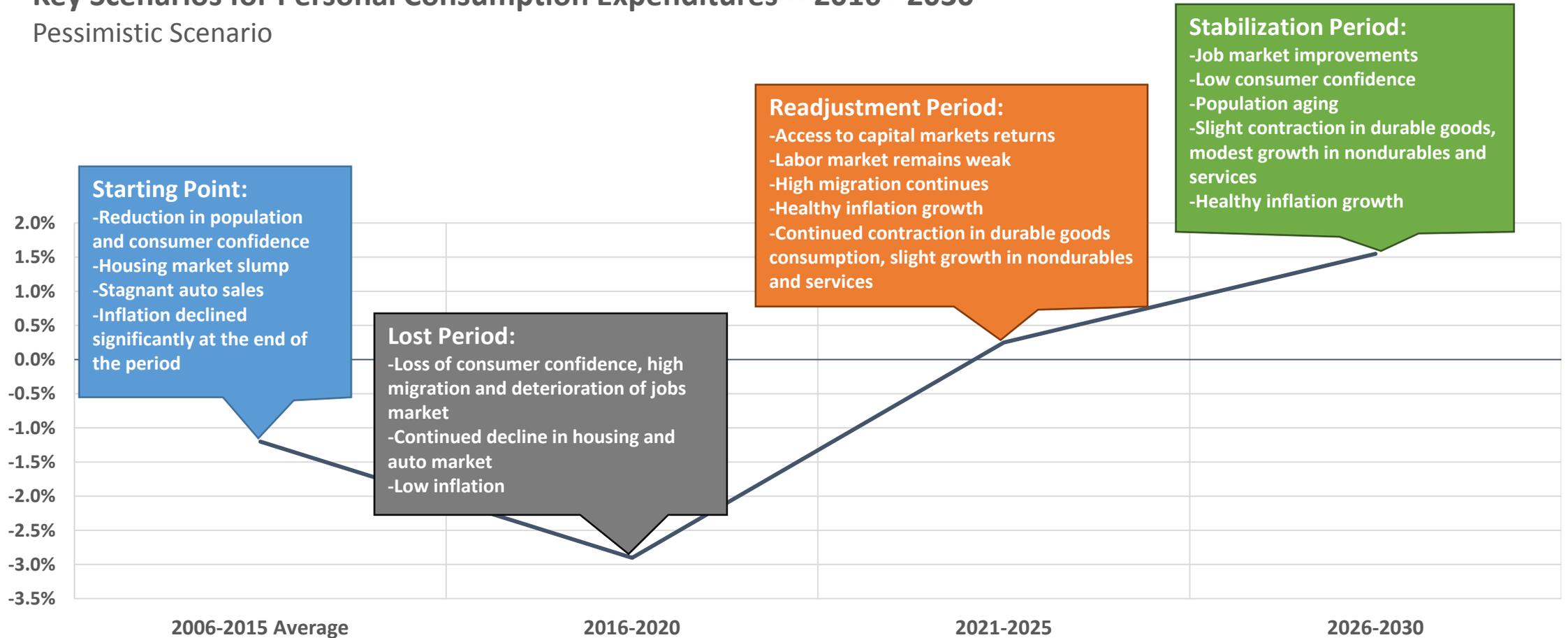
Optimistic Scenario



DETAILED SCENARIOS: PERSONAL CONSUMPTION EXPENDITURES

Key Scenarios for Personal Consumption Expenditures -- 2016 - 2030

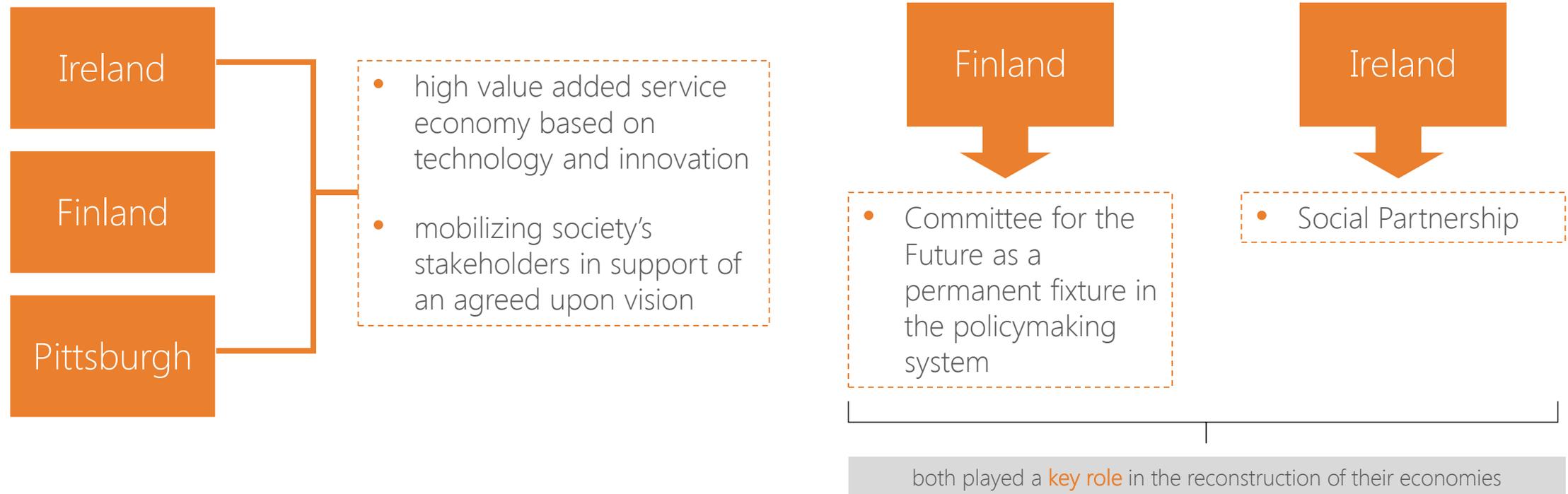
Pessimistic Scenario



PESSIMISTIC

MAIN ACTIONS

There is no one specific route for reconstructing an economy that has suffered both economic contraction and severe loss of population. There are, however, **initiatives** that are common to many of these success stories:



MAIN ACTIONS

With the potential implementation of austerity measures by the Oversight Board created in PROMESA, the Island should expect traditional structural adjustment programs which are centered on the supply side of the equation; however, an alternative approach must be adopted that incorporates the conditions inherent in a smaller economy with a smaller population:

Outward orientation

Strengthening Internal linkages

Mobilizing stakeholder integration

Long term vision

Innovation driven development

Strong emphasis on core competences

Effective management of the economy's openness

Strategic competence

Network creation as a key competence