Flash Economics

N° 5
January 21st, 2025

An acute public finance problem in countries where the working-age population is shrinking faster than the total population

The decline in the working population (for example in China, the eurozone countries, Japan, South Korea, etc..) is reducing potential growth. But the worst situation is in countries where the working-age population is shrinking and will continue to shrink relative to the total population. Since tax revenues are essentially linked to the working-age population, and public spending is essentially linked to the total population, these countries will find it increasingly difficult to balance their public accounts and reduce their budget deficits.

Investors should therefore prefer countries where the working-age population is both growing and increasing at roughly the same rate as the total population (for example, the United States, India and Africa).

Patrick Artus
Senior Economic Advisor
patrick.artus-ext@ossiam.com
@PatrickArtus

Marketing communication: this document is a marketing presentation. It has not been prepared in accordance with legal requirements designed to promote the independence of investment research; and it is not subject to any prohibition on dealing ahead of the dissemination of investment research.

There are worse things than a shrinking working-age population: a working-age population that is shrinking in relation to the total population

In many countries, **the working-age population is falling**: this is the case, for example, in China, Germany, France, Spain, Italy, Japan and South Korea (**Charts 1a/b/c**).

Chart 1A
Population aged 15 to 64 (as % per year)

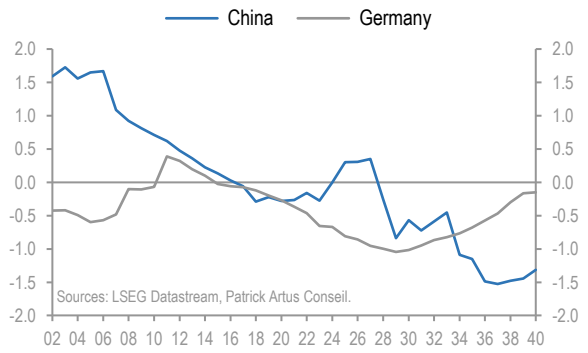


Chart 1B
Population aged 15 to 64 (as % per year)

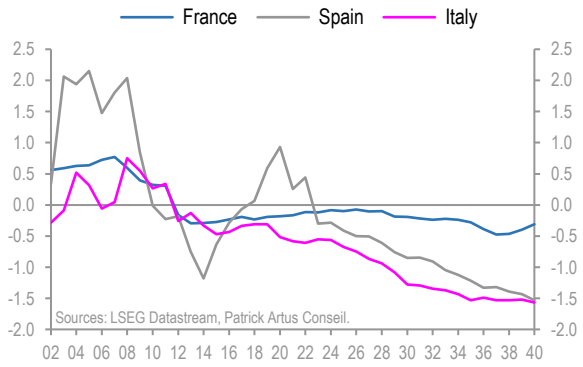
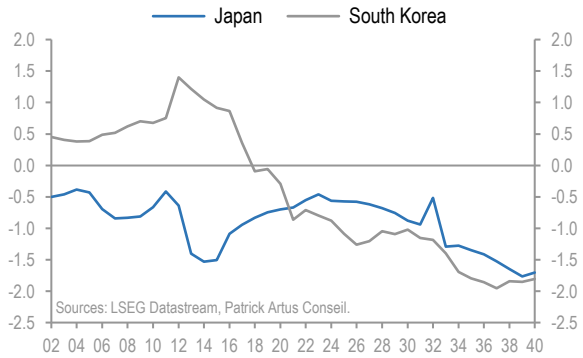


Chart 1C
Population aged 15 to 64 (as % per year)



This decline in the working-age population **implies weaker potential growth** (**Charts 2a/b/c**).

Chart 2A
Real GDP (Y/Y as % smoothed over 5 years)

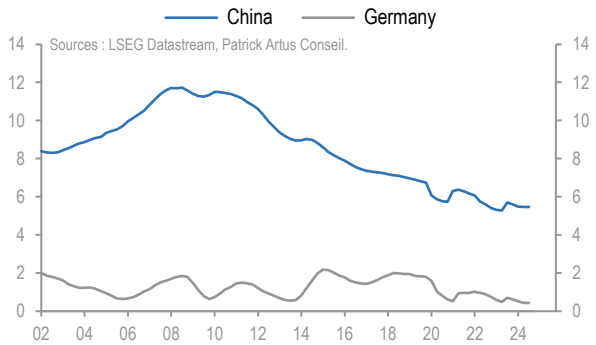


Chart 2B
Real GDP (Y/Y as % smoothed over 5 years)

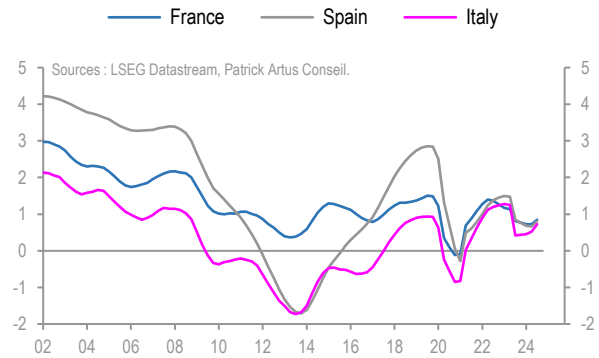
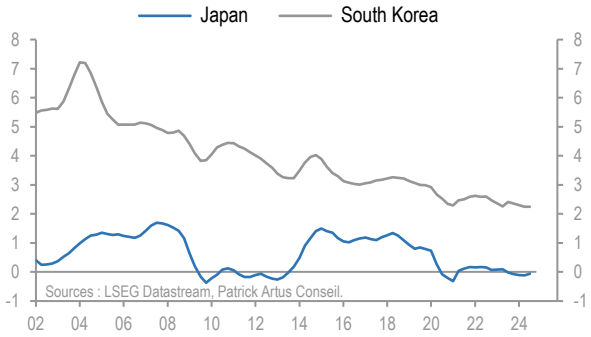


Chart 2C
Real GDP (Y/Y as % smoothed over 5 years)



But the situation may be more difficult if countries have a working-age population that is shrinking faster than the total population.

Indeed, **tax revenues are mainly linked to the working-age population, but public spending is mainly linked to the total population, due to the presence of spending on education, pensions and the high health costs of the elderly.**

Charts 3A/B/C/D/E/F/G show that this distortion in the structure of the population (working-age population declining more than the total population) is present in the 7 countries studied above.

Chart 3A
China: Total population and population aged 15 to 64
(2002 = 100)

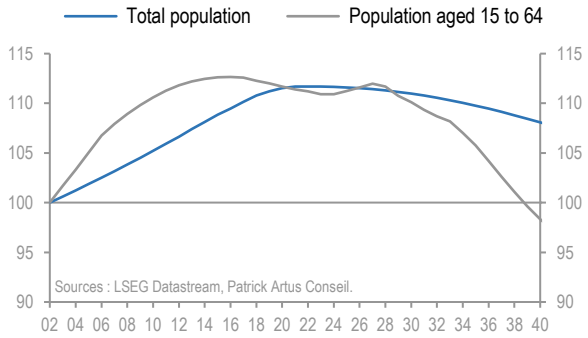


Chart 3B
Germany: Total population and population aged 15 to 64
(2002 = 100)

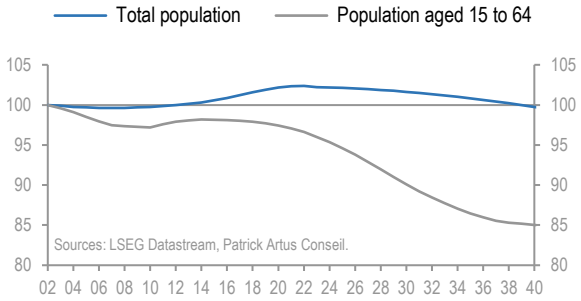


Chart 3C
France: Total population and population aged 15 to 64
(2002 = 100)

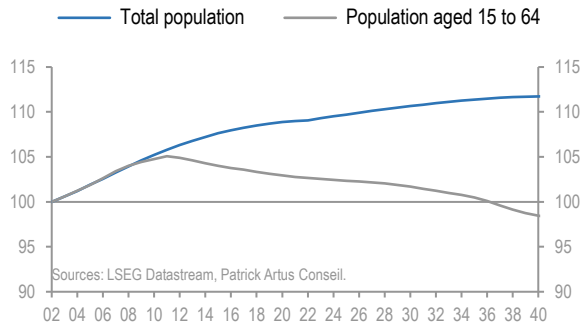


Chart 3D
Spain: Total population and population aged 15 to 64
(2002 = 100)

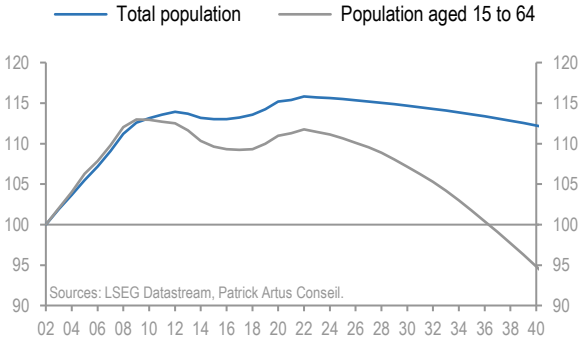


Chart 3E
Italy: Total population and population aged 15 to 64
(2002 = 100)

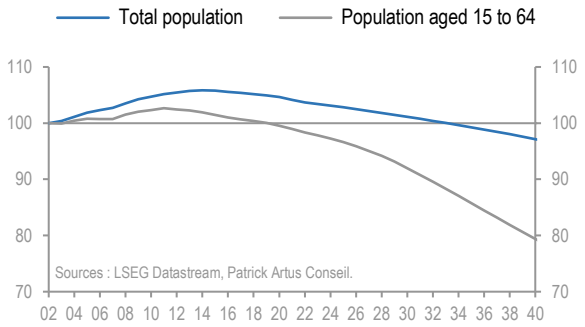


Chart 3F
Japan: Total population and population aged 15 to 64
(2002 = 100)

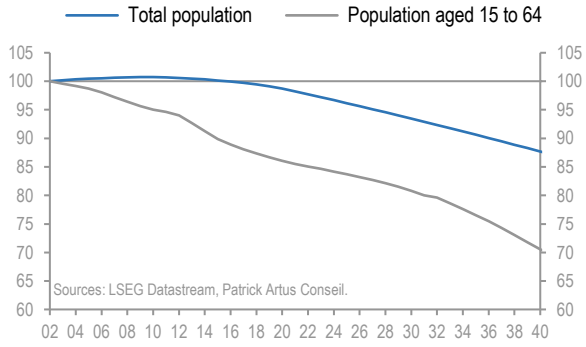
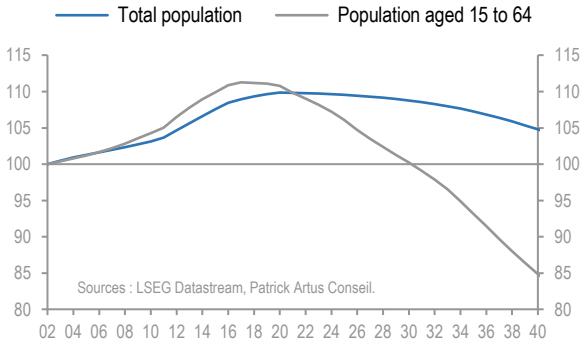


Chart 3G
South Korea: Total population and population aged 15 to 64 (2002 = 100)



Increasing difficulties for public finances in countries where the working-age population is shrinking faster than the total population

When the working-age population is shrinking relative to the total population, tax revenues are expected to grow more slowly than public spending, unless the tax burden increases continuously.

Let's look at **tax revenues, public spending and the public deficit** in the 7 countries mentioned above (**Charts 4A/B to 10A/B**).

Chart 4A
China: Public spending and tax revenues
(as % of nominal GDP)

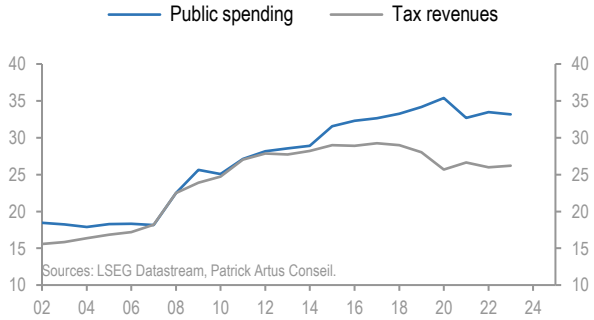


Chart 4B
China: Fiscal surplus or deficit (as % of nominal GDP)

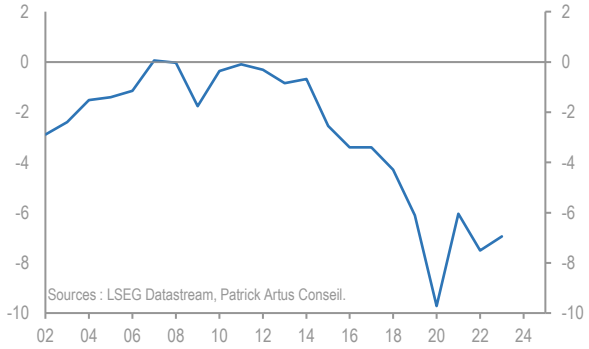


Chart 5A
Germany: Public spending and tax revenues
(as % of nominal GDP)

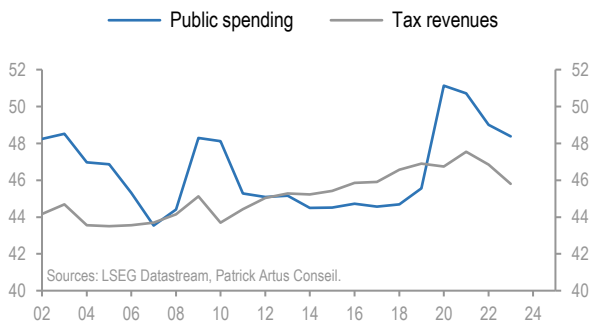


Chart 5B
Germany: Fiscal surplus or deficit (as % of nominal GDP)

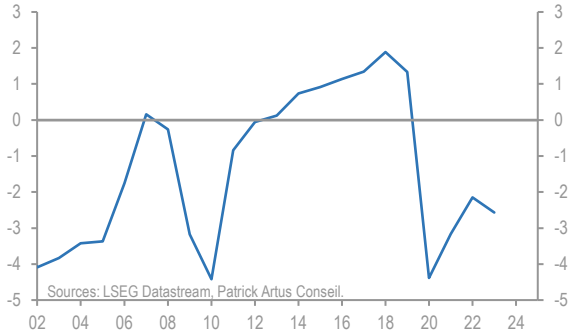


Chart 6A
France: Public spending and tax revenues
(as % of nominal GDP)

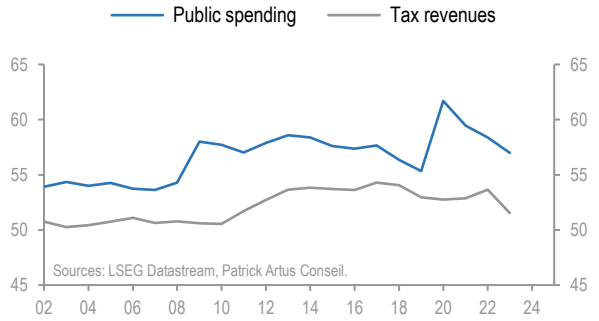


Chart 6B
France: Fiscal surplus or deficit (as % of nominal GDP)



Chart 7A
Spain: Public spending and tax revenues
(as % of nominal GDP)

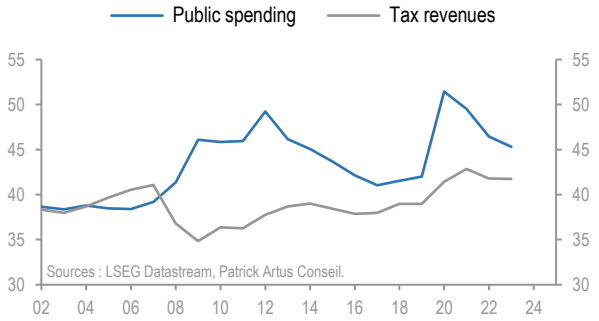


Chart 7B
Spain: Fiscal surplus or deficit (as % of nominal GDP)

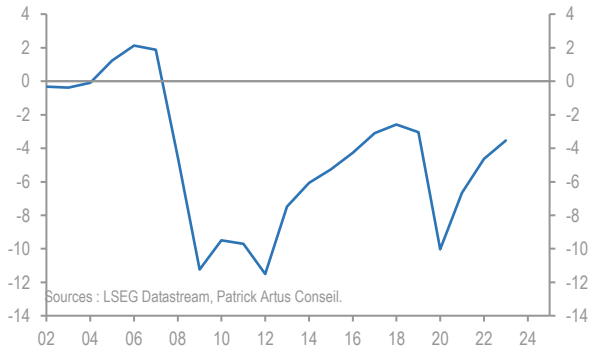


Chart 8A
Italy: Public spending and tax revenues
(as % of nominal GDP)

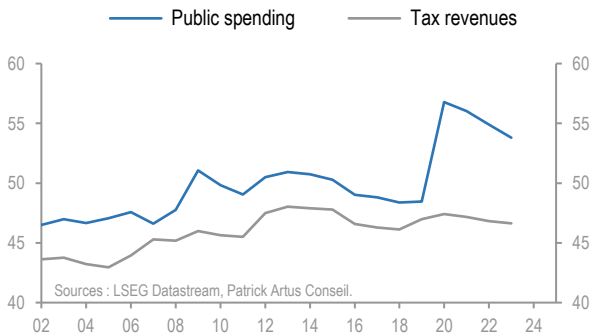


Chart 8B
Italy: Fiscal surplus or deficit (as % of nominal GDP)

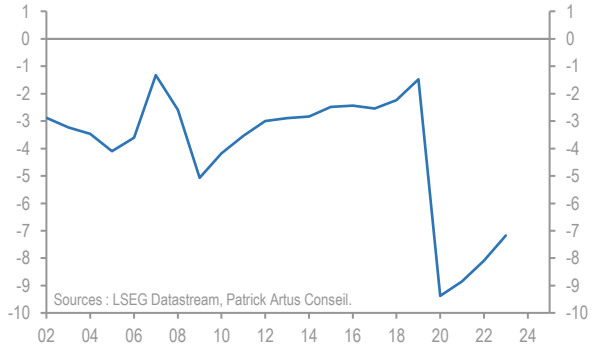


Chart 9A
Japan: Public spending and tax revenues
(as % of nominal GDP)

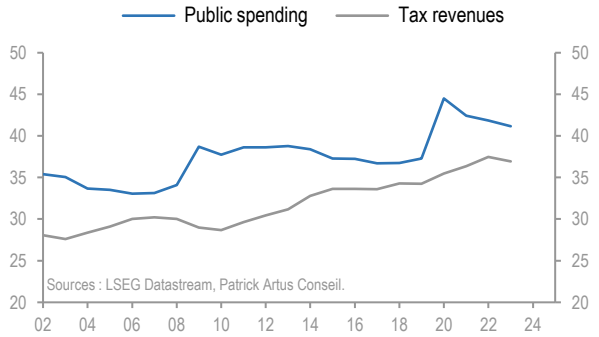


Chart 9B
Japan: Fiscal surplus or deficit (as % of nominal GDP)

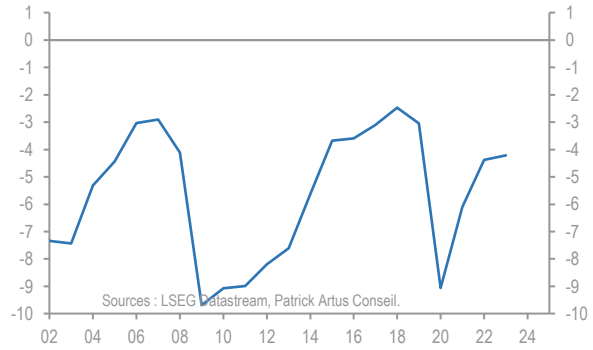


Chart 10A
South Korea: Public spending and tax revenues
(as % of nominal GDP)

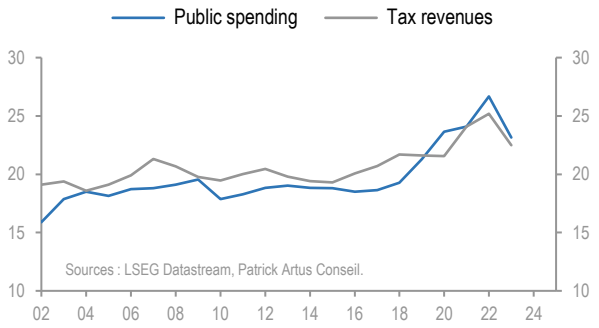
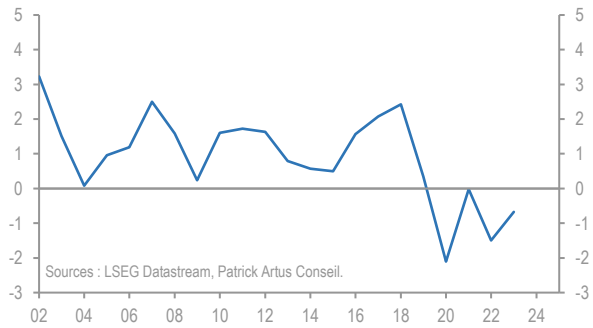


Chart 10B
South Korea: Fiscal surplus or deficit
(as % of nominal GDP)



One can see that **public spending is rising faster than tax revenues in China, France, Spain and Italy, and that Japan** has a structural public deficit. The only exceptions are Germany and South Korea, due to budgetary rules (Germany) and increased tax pressure (South Korea).

Summary: focus on countries where the working-age population is not falling relative to the total population

When the working-age population is falling, potential growth is weakened; if, in addition, the working-age population is falling more than the total population, since public spending is linked to the total population and taxes are linked to the working-age population, there is either a growing budget deficit or an increase in the tax burden. Investors should therefore prefer countries where the working-age population is not falling relative to the total population.

Charts 11A/B/C show that in the United States the total population is growing faster than the working-age population, but with a much smaller gap than in the countries seen above; and that in Africa and India there is a parallel increase between the total population and the working-age population.

Chart 11A
United States: Total population and population aged 15 to 64 (2002 = 100)

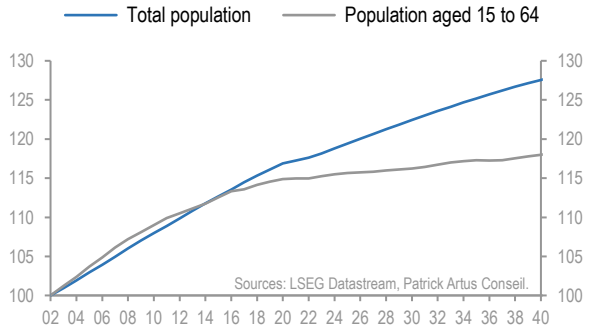


Chart 11B
India: Total population and population aged 15 to 64 (2002 = 100)

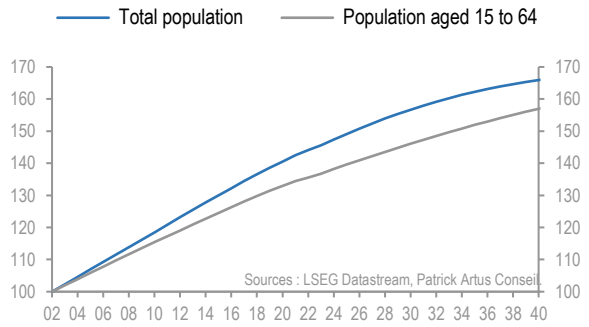
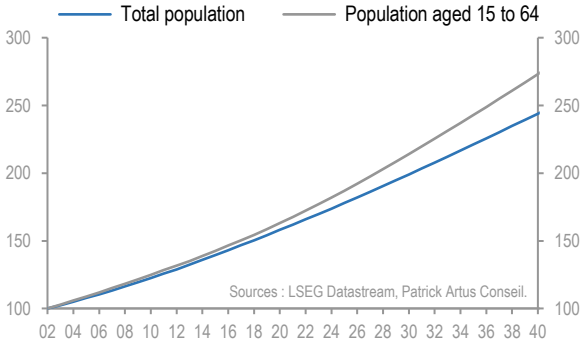


Chart 11C
Africa: Total population and population aged 15 to 64 (2002 = 100)



Disclaimer

Ossiam, a subsidiary of Natixis Investment Managers, is a French asset manager authorized by the Autorité des Marchés Financiers (Agreement No. GP-10000016). Although information contained herein is from sources believed to be reliable, Ossiam makes no representation or warranty regarding the accuracy of any information of which it is not the source. The information presented in this document is based on market data at a given moment and may change from time to time. This material has been prepared solely for informational purposes only and it is not intended to be and should not be considered as an offer, or a solicitation of an offer, or an invitation or a personal recommendation to buy or sell participating shares in any Ossiam Fund, or any security or financial instrument, or to participate in any investment strategy, directly or indirectly. It is intended for use only by those recipients to whom it is made directly available by Ossiam. Ossiam will not treat recipients of this material as its clients by virtue of their receiving this material. All performance information set forth herein is based on historical data and, in some cases, hypothetical data, and may reflect certain assumptions with respect to fees, expenses, taxes, capital charges, allocations and other factors that affect the computation of the returns. Past performance does not predict future returns. Any opinions expressed herein are statements of our judgment on this date and are subject to change without notice. Ossiam assume no fiduciary responsibility or liability for any consequences, financial or otherwise, arising from, an investment in any security or financial instrument described herein or in any other security, or from the implementation of any investment strategy. This information contained herein is not intended for distribution to, or use by, any person or entity in any country or jurisdiction where to do so would be contrary to law or regulation or which would subject Ossiam to any registration requirements in these jurisdictions. This material may not be distributed, published, or reproduced, in whole or in part.