

WHAT A DIFFERENCE A YEAR MAKES....or DOES IT?

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Purpose

2010 conclusion

Changes in Supply Outlook for SAP & AA

Changes in Demand Outlook for SAP

Is the supply crunch easing?

What does 2012 and beyond hold for buyers?

Risk and Profitability

AA supply problems

Problems of 2010 are behind us...

American Acryls running well

Dow Deer Park operating at high rates

Investment plans for Clear Lake and Deer Park

Demand for Acrylates is weak with the economy

Look back at our SAP capacity forecasts

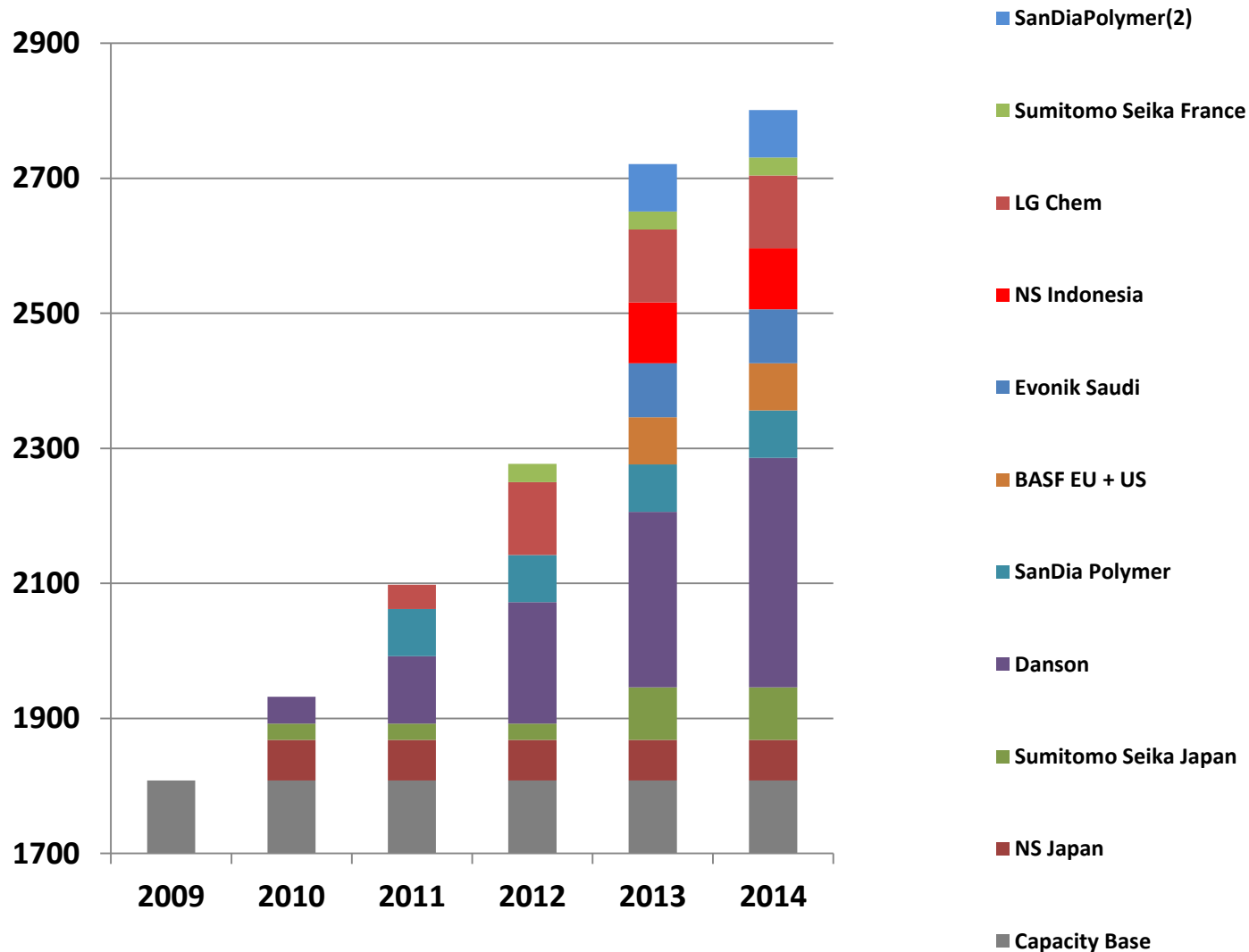
CAN NEW SAP CAPACITY HELP?

Producer	Location	Capacity	Timing
Nippon Shokubai	Japan	60	Q4 2010
Sumitomo Seika	Japan	24	Q4 2010
Nippon Shokubai	Indonesia	30	End 2012
San Dia Polymer	China	70	Late 2011
BASF	China	60	2012
LG Chem	Korea	70	2012
Danson	China	120	2010/ 2011
Evonik	Saudi Arabia	80	End 2012

CAN NEW SAP CAPACITY HELP?

Producer	Location	Capacity	Timing
Nippon Shokubai	Japan	60	Q4 2010
Sumitomo Seika	Japan	24	Q4 2010
Nippon Shokubai	Indonesia	90	End 2012
San Dia Polymer	China	70	April 2011
BASF	China	60	2012
LG Chem	Korea	108	2011/2012
Danson	China	100	2010/ 2011
Evonik	Saudi Arabia	80	End 2013

SAP capacity growth 2010 – 2014



Growth is driven by customers

Kimberly – Clark

Procter & Gamble

SCA

Unicharm

Growth is driven by demographics

Emerging markets: Indonesia, Vietnam, Brazil,

Aging Population: USA, Europe

BASF considering all options...

- incremental expansion EU/ US

Antwerp + Freeport +70 kT

BASF China + 60 kT early 2014

BASF Malaysia study/ tbc timing?

BASF Brazil + 60 kT late 2014

Evonik in Middle East

JV Saudi Arabia

+ 80 kT late 2013

Nippon Shokubai pushing in Asia

Himeji	2010 complete
Indonesia	2012 + 90 kT
Bayport TX	mid 2012

Sumitomo Seika

5 year plan to get to 300 kT global

France + 27 kT

Himeji + 54 kT

2014 total = 276 kT

San Dia Polymer

Nanjing 2011 complete

Further expansion expected in China or Thailand

Yixing Danson

Ramping up train 2 & 3 for total 100 kT

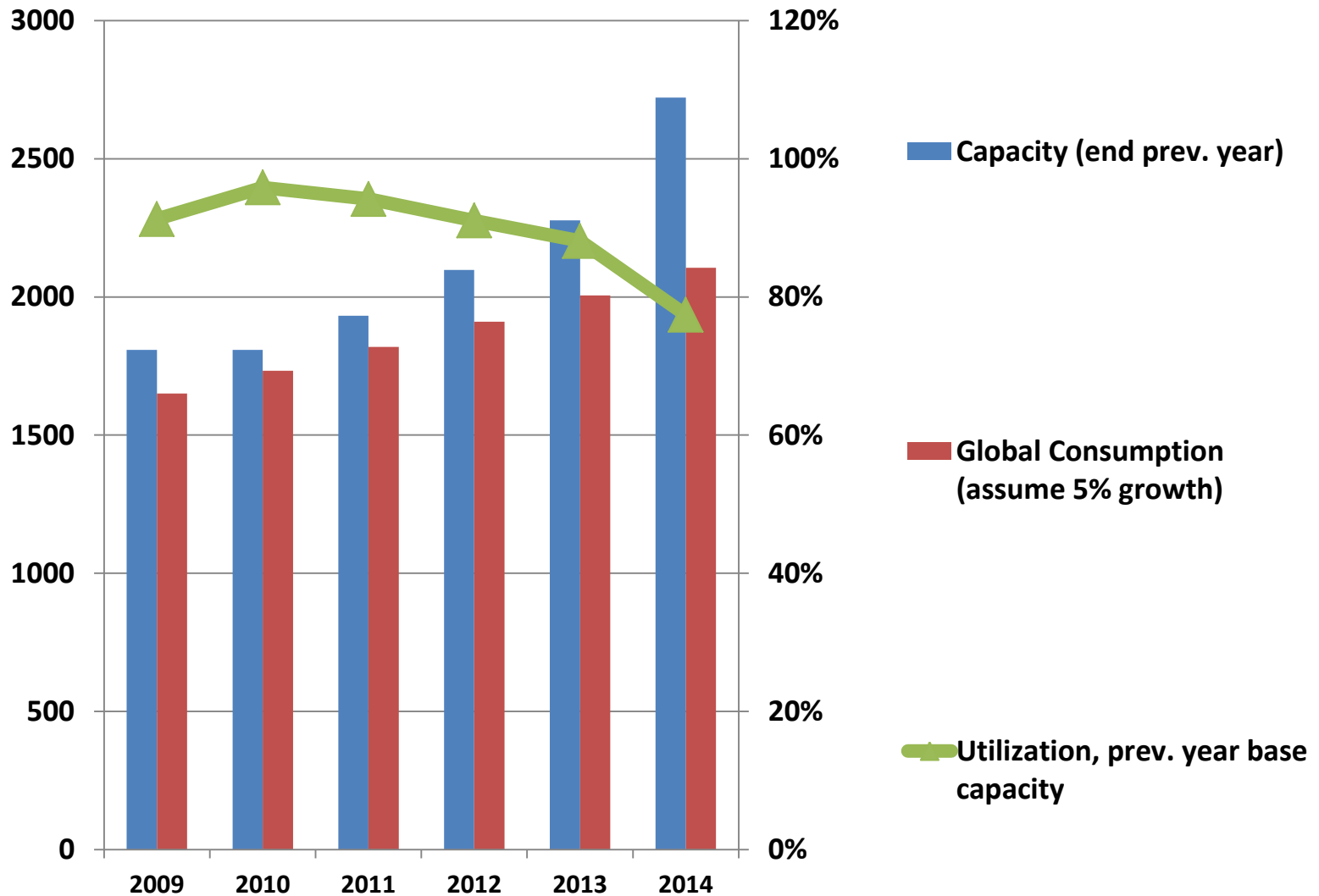
Taixing GAA plant provides feedstock

Expansions planned depend on demand growth

+ 80 kT / year proposed depending on demand

2012, 2013, 2014

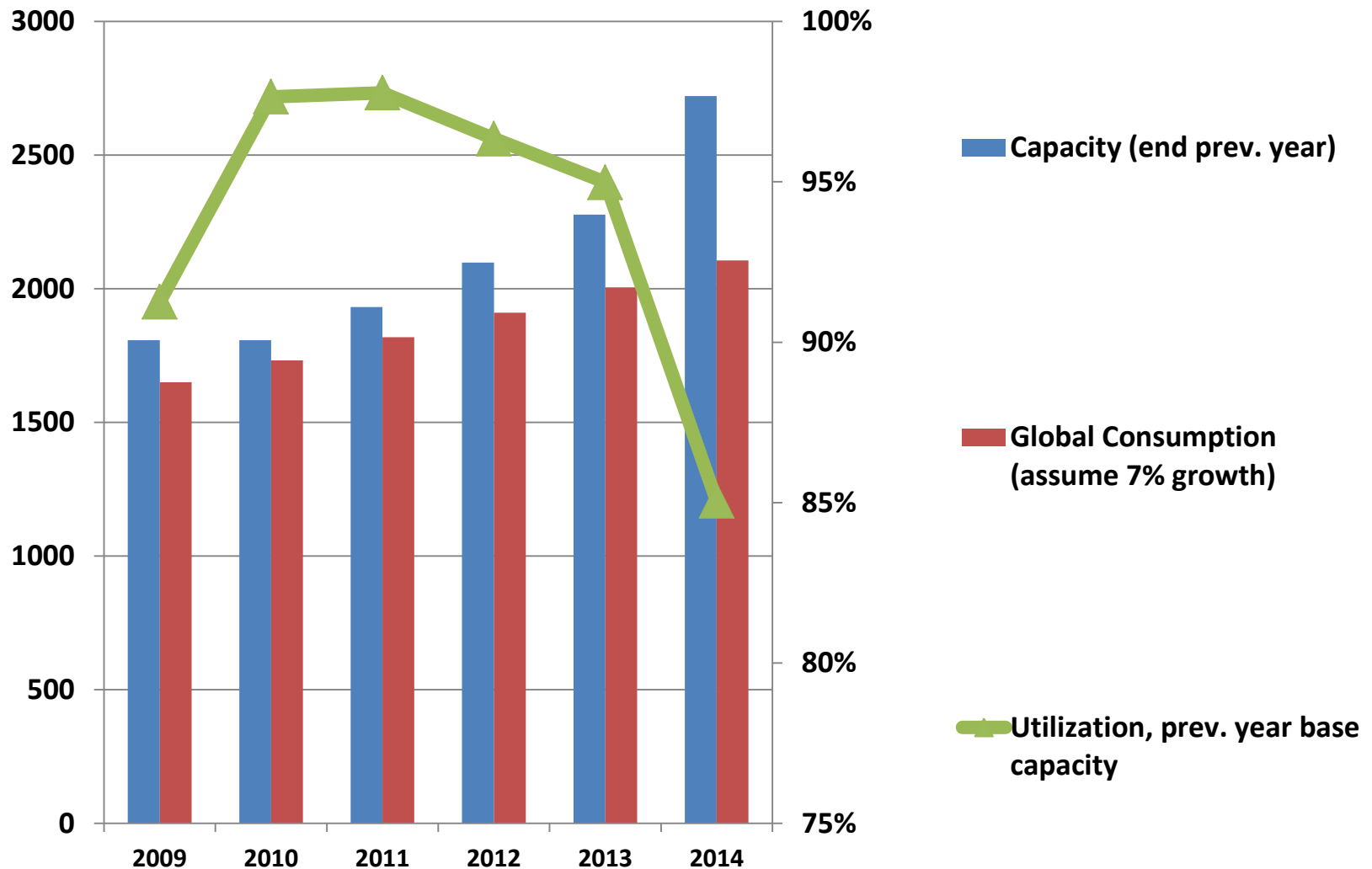
At 5% growth, SAP Utilization falls < 80%



But consider

Growth rate can be higher than projection as diaper penetration increases globally

At 7% growth, SAP remains very tight



Risks?

Falling Birth Rate

Industry Concentration in Japan

Profitability v. Growth

China was officially home to 1.34bn people on November 1st 2010, excluding Hong Kong and Macau, according the latest results of the 2010 population census. That number failed to impress many, who were expecting closer to 1.4bn. ***Annual average population growth over the past decade was just 0.57%*** (the ***Economist Intelligence Unit*** had forecast 0.53%), which is slightly over half the rate reported for the previous decade, triggering fears of an impending demographic implosion.

Missing from the flurry of new data was China's most controversial demographic statistic, the total fertility rate. The total fertility rate, or TFR, is the expected number of births per woman of childbearing age in a lifetime. Depending on which source of census data one uses, the 2000 census showed ***TFRs ranging from 1.2 to 1.4—already among the world's lowest. The 2010 figure is unlikely*** to be higher given rapid modernization and urbanization, and will no doubt fuel the argument of those calling for liberalization.

As a partial consequence, the gender ratio for China's newborns—now 1.18 compared with 1.17 in 2000—is getting worse and will only serve to compound the problem of low fertility. Under a constant newborn gender ratio scenario, ***China's population will peak in 2023, according to EIU projections.***

Industry is Too focused

Two producers in Himeji Japan

After expansions

60% of NS & SS capacity

20% of global capacity

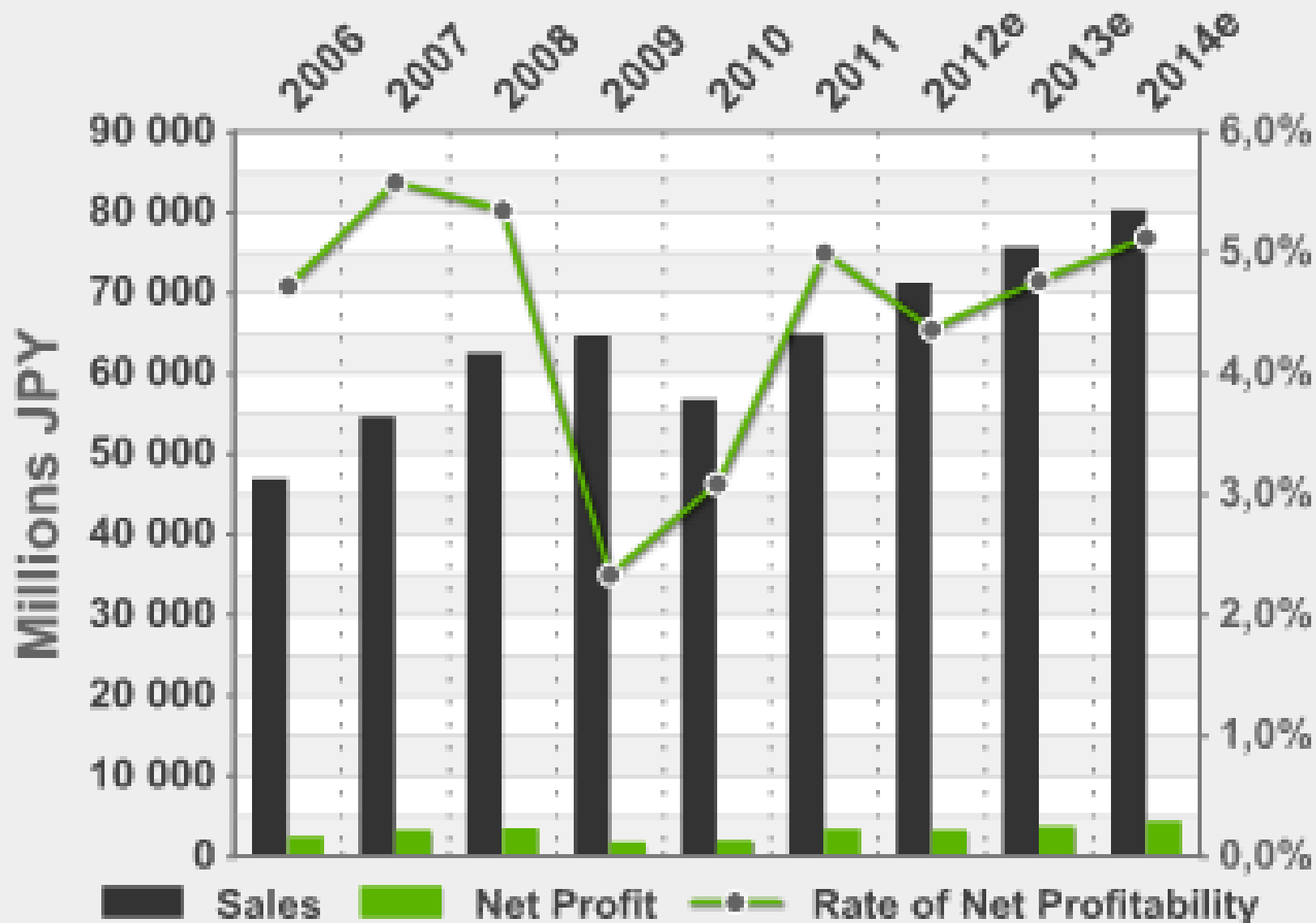
Profitability v. Growth?

SAP is still a tough business

Integrated companies are advantaged

Duty changes

SUMITOMO SEIKA CHEMICALS



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Summary:

Fear of new entrant sparked rush to build?

Short term abundance of Acrylic Acid

However:

Industry concentration is still a concern

Falling Birth Rates

Production globalization

Conclusion:

Change is superficial, SAP market will stay balanced to tight....

THANK YOU

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