



Forecast for the Global Pulp and Paper Industry

Rod Young

Chief Economic Advisor

October 28, 2009



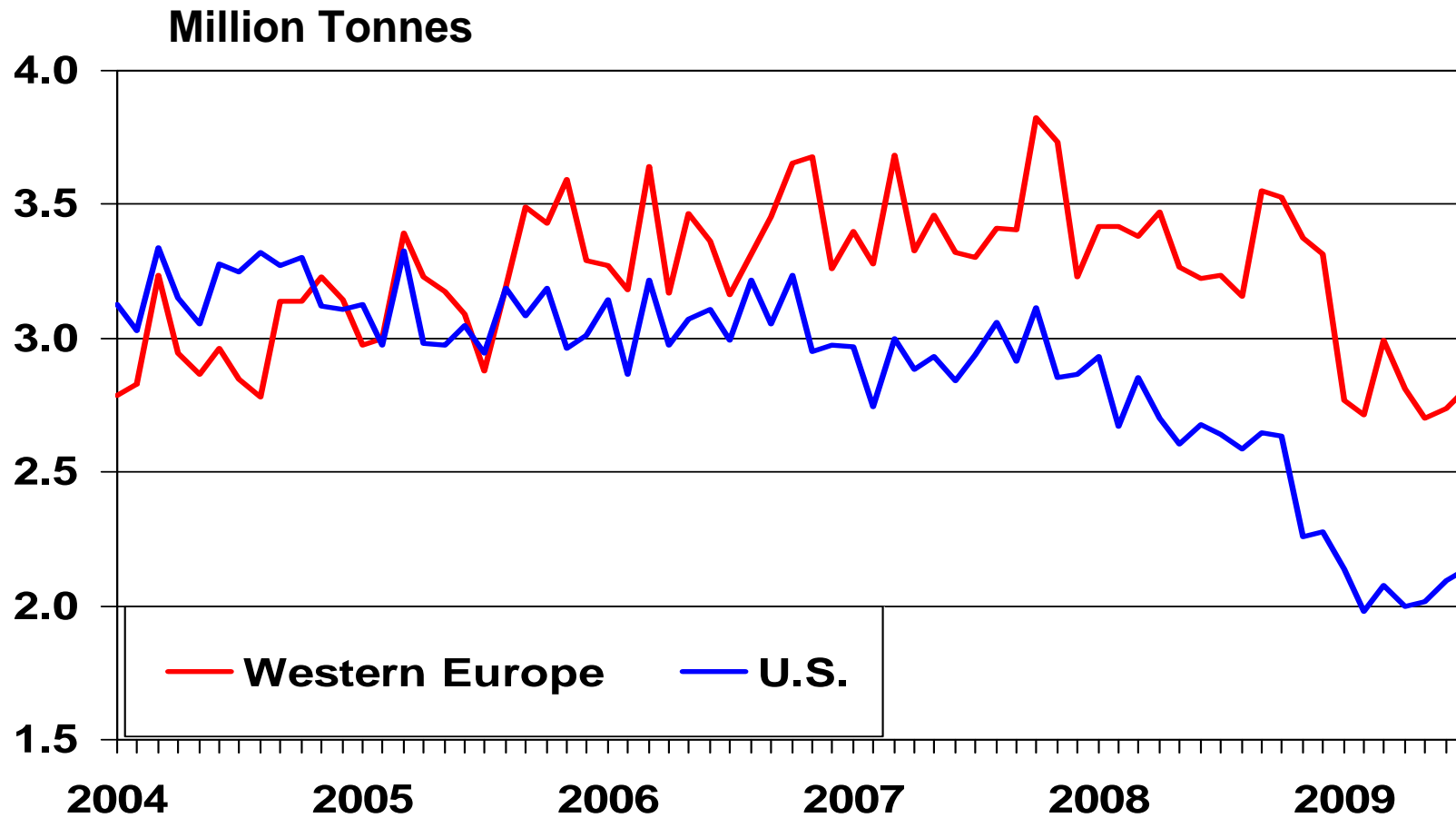
Overview

- ▶ Recent Market Developments
 - Beginning to Climb from First-Half Trough
- ▶ Prospects for Demand Growth Through 2011
 - Developing Countries at the Forefront
- ▶ What About Supply?
 - Return to Investing in New Capacity
- ▶ Global Trade Resumes Growth
 - Focused on Fiber Flows

Developed World Regions Just Starting to Emerge from Dramatic Downturn

- ▶ Paper and Board Demand Plunged in First Half
 - Led by Graphic Paper Grades
 - Partially due to Inventory Reductions
- ▶ General Economies Beginning to Show Improvement
 - Supported by Extensive Government Stimulus
 - Leading to a Modest Upswing in Paper and Board Demand
- ▶ Papermakers Taking Opportunity to Announce Price Increases
 - After Massive Amounts of Downtime
 - Reacting to Rising Fiber Costs

Graphic Paper Demand in Europe and USA



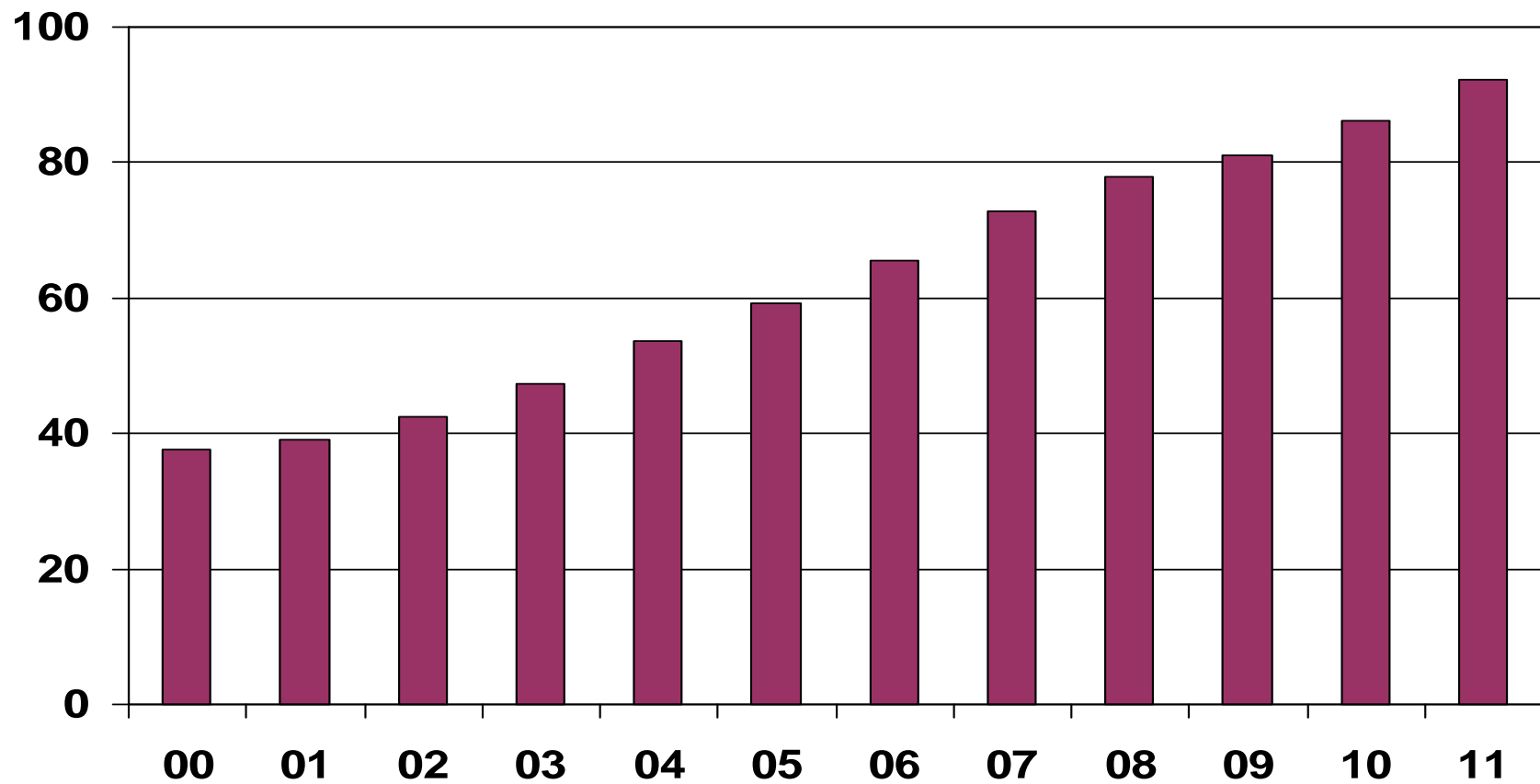
Paper and Board Demand in Developing World Has Continued Upward

- ▶ China Still Leading the Charge
 - Domestic Demand Supported by Government Stimulus
 - Surging Exports of Graphic Paper, Especially Coated
 - Inventory Rebuild after Drawdown in Late 2008

- ▶ Other Developing Countries Continue to Grow
 - Other Asian Countries Supported by China
 - India Still on Strong Growth Track
 - Middle East Benefiting from Energy Markets

Chinese Paper and Board Demand

Million Tonnes



Fiber Demand Has Surged in the Developing World

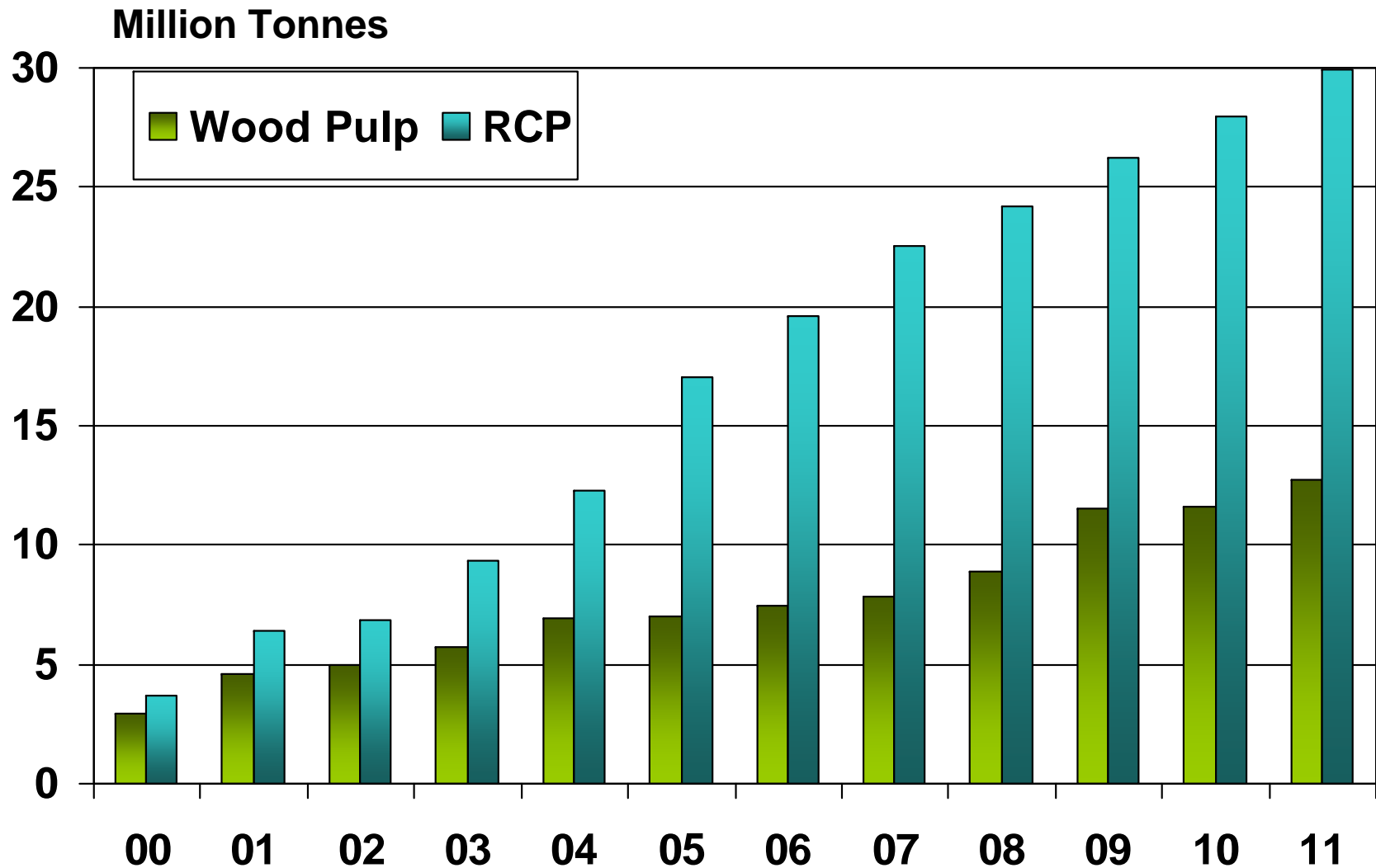
China is, Once Again, Leading This Development

- Rebuilding Inventories after Late-2008 Reduction
- Substituting Cheap Imported Fiber for Domestic Supplies
- Running the Mills at Considerably Higher Rates

Suppliers of Fiber from Other World Regions

- Benefiting from Strong Demand in Asia
- Brazilian Producers Mainly in Wood Pulp
- Recovered Paper Suppliers from the Developed World

Chinese Imports of Recovered Paper and Wood Pulp



World Paper and Board Usage Will Return to Solid Growth in 2010-2011

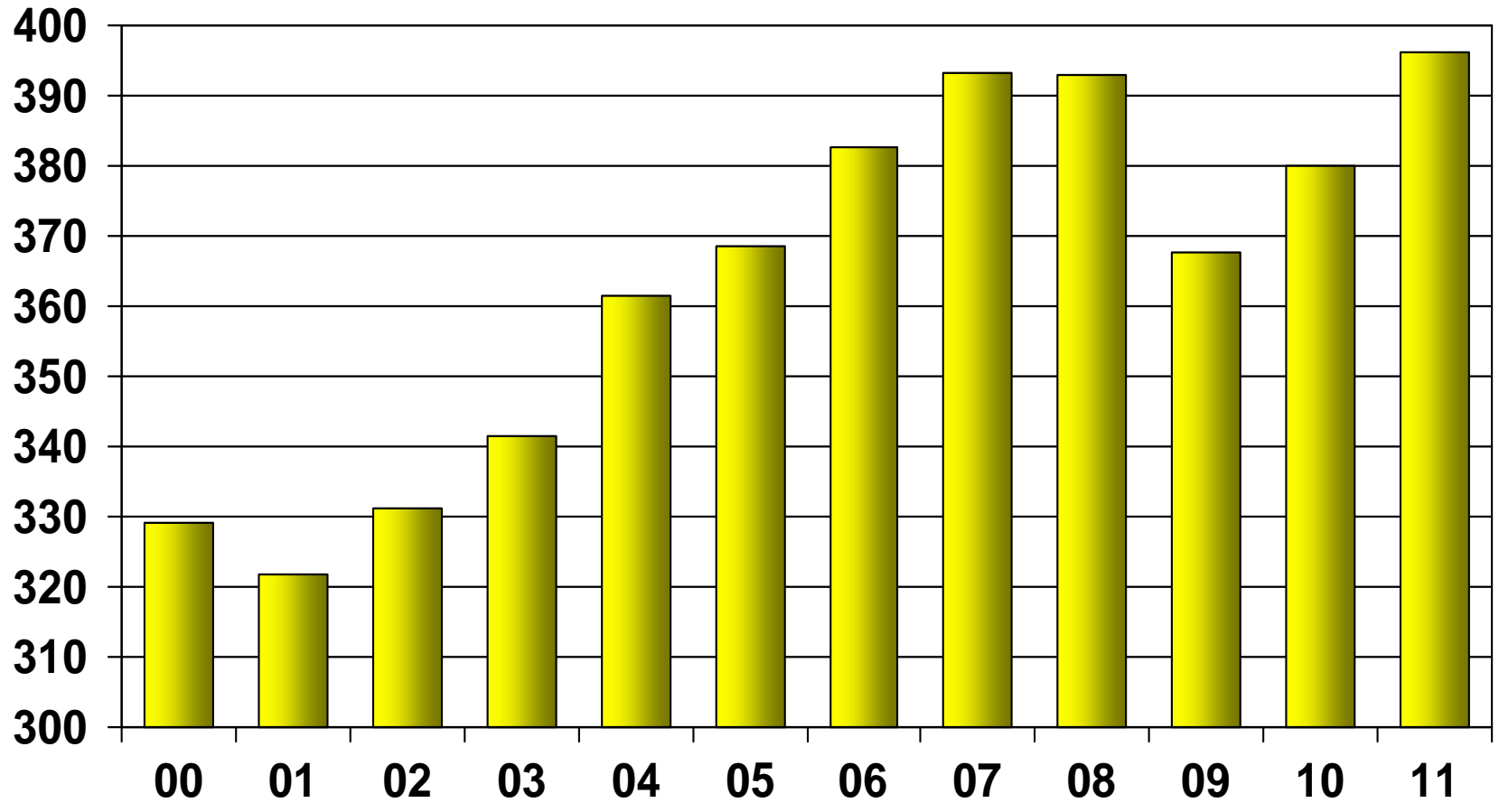
- ▶ After Dropping Sharply in 2009
 - As a Result of the “Great Recession”

- ▶ Paper and Board Demand Will be Pulled up by:
 - Rebound in General Economy, Resulting from Large Government Stimulus Packages
 - Inventory Rebuilding by End Users
 - Competitiveness of Paper in Certain Markets

- ▶ World Usage Projected at 396 Million Tonnes in 2011
 - Only 3 Million Tonnes Above Last Year

World Paper and Board Demand

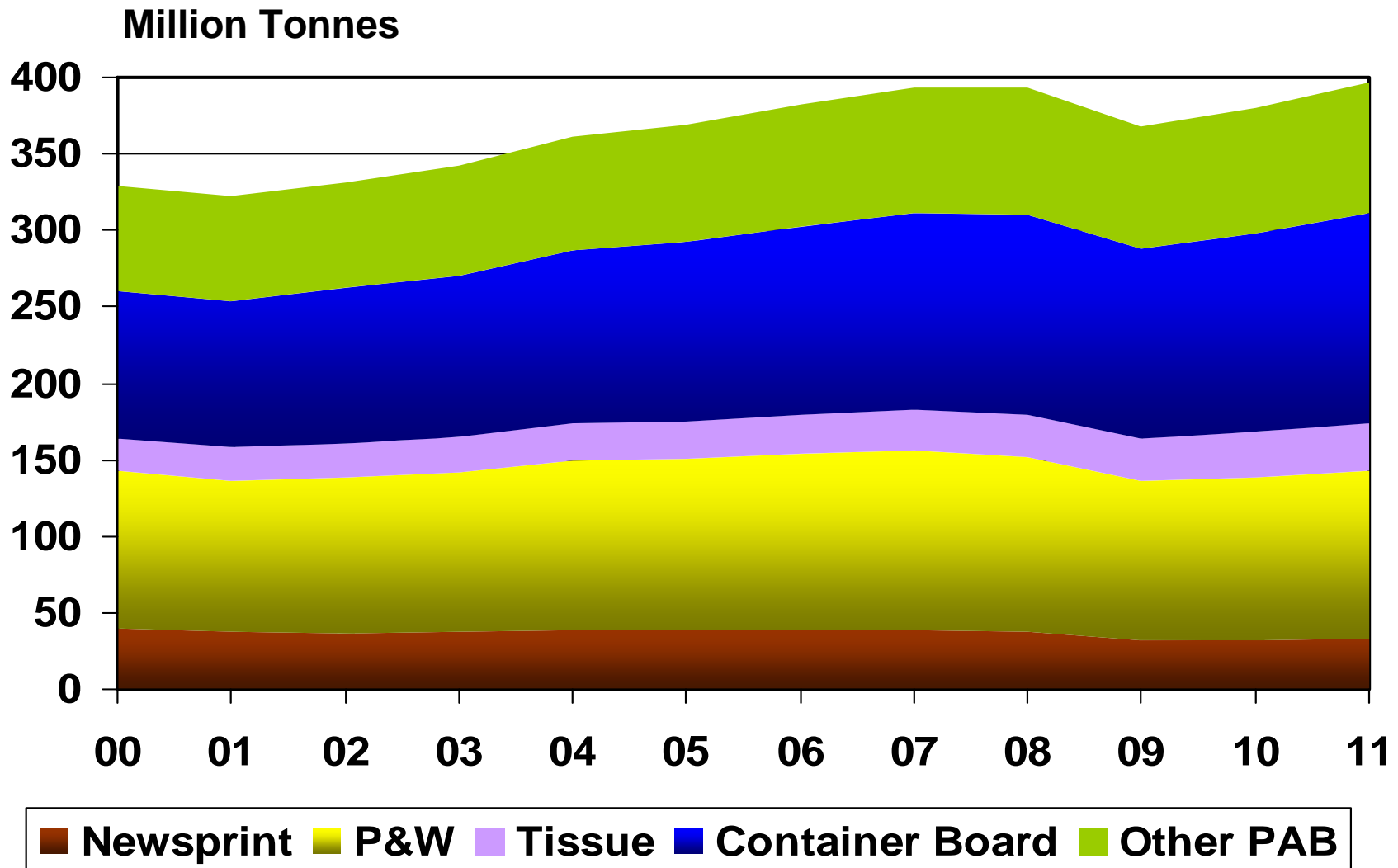
Million Tonnes



Packaging Grades Will be at the Forefront of World Paper and Board Demand Growth

- ▶ Containerboard Expands on its Leadership Position
 - Competitiveness Versus Other Packaging Alternatives
 - Environmental Credentials
 - Boxboard Limited by Plastics Competition
- ▶ Tissue Will Grow at the Fastest Pace
 - Rising Incomes in Developing World
- ▶ Graphic Papers Will Struggle
 - Strong Competition from Electronics

World Paper and Board Demand by Major Grade

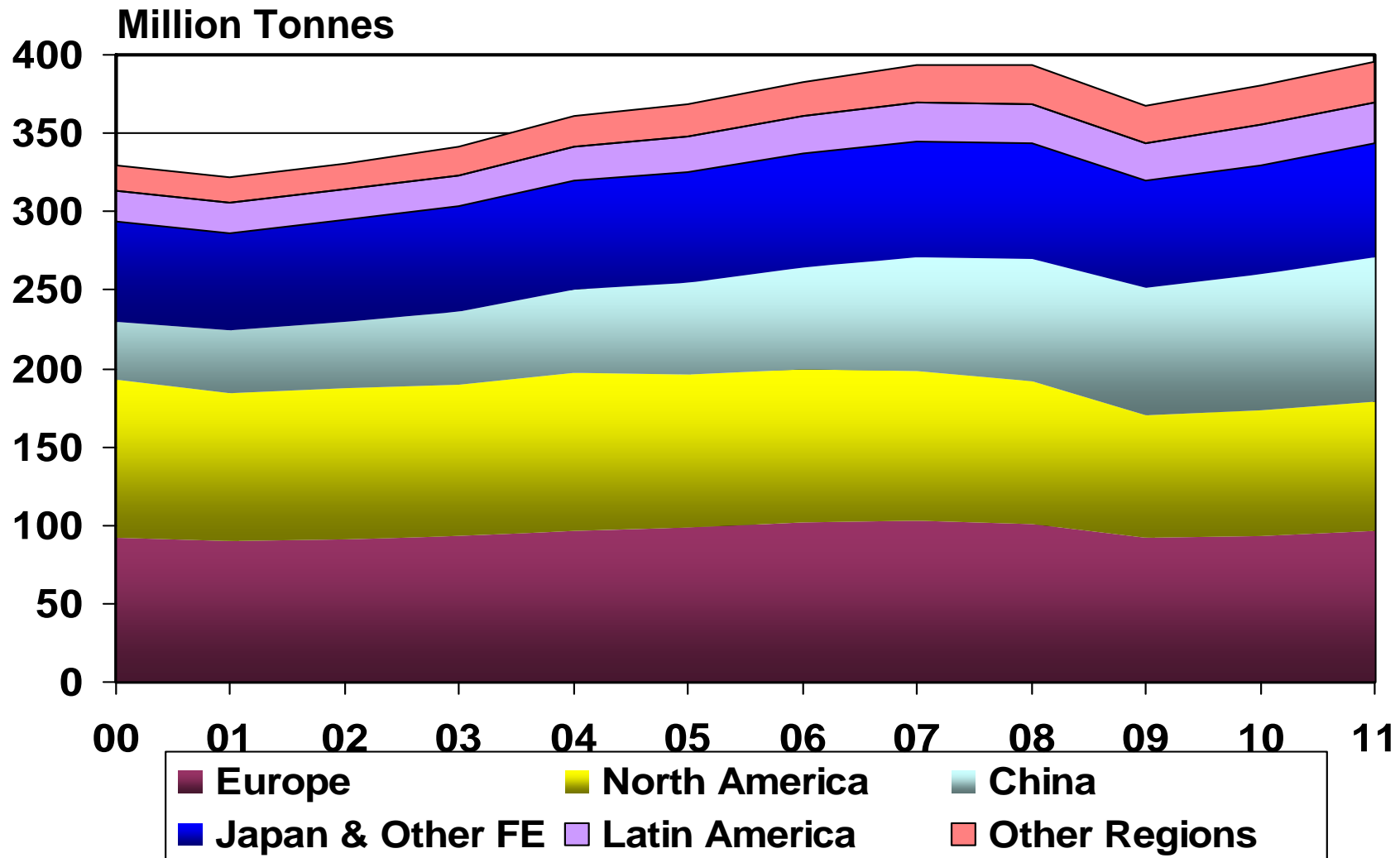


Developing Regions Will Generate Virtually All of the Demand Growth

- ▶ Major Positive Factors Will Include:
 - Strong Economic Development, Led by China
 - Enormous Population, with Rising Middle Class
 - Rising Literacy Rates

- ▶ Developed World Demand Constrained by:
 - Already-High Penetration of Paper
 - Stable, to Even Declining, Population in Most Areas
 - Competitive Pressure from Developing World on General Economies
 - Strong Competition from Electronics

Paper and Board Demand in Major Regions of the World

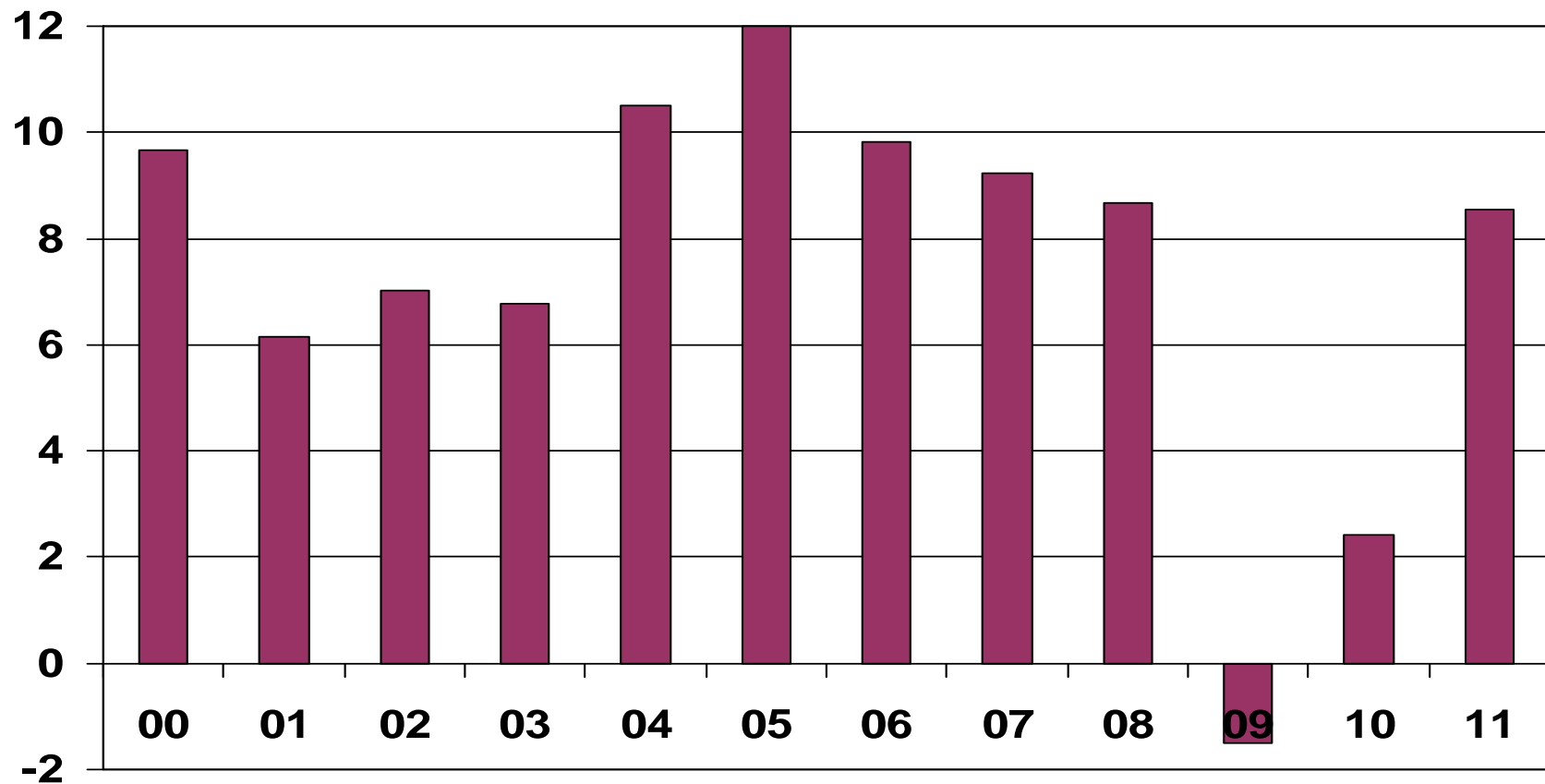


Papermakers Have Been Diligent in Trying to Match Output to the Reduced Demand

- ▶ Many Closures of Machines and Mills in Developed World
 - Almost All Grades Have Been Hit, but Graphic Papers Most
 - North American Producers Have Been Most Aggressive
- ▶ Producers in Developing World Have Slowed Their Expansions
 - But Have Continued to Add New Capacity
- ▶ Operating Rates Have Still Dropped
 - Although not Nearly as Far as Might Have Been Expected, Given the Plunge in Demand
 - Downtime Has Been Taken More Proactively, Also

World Paper and Board Net Capacity Expansion

Million Tonnes



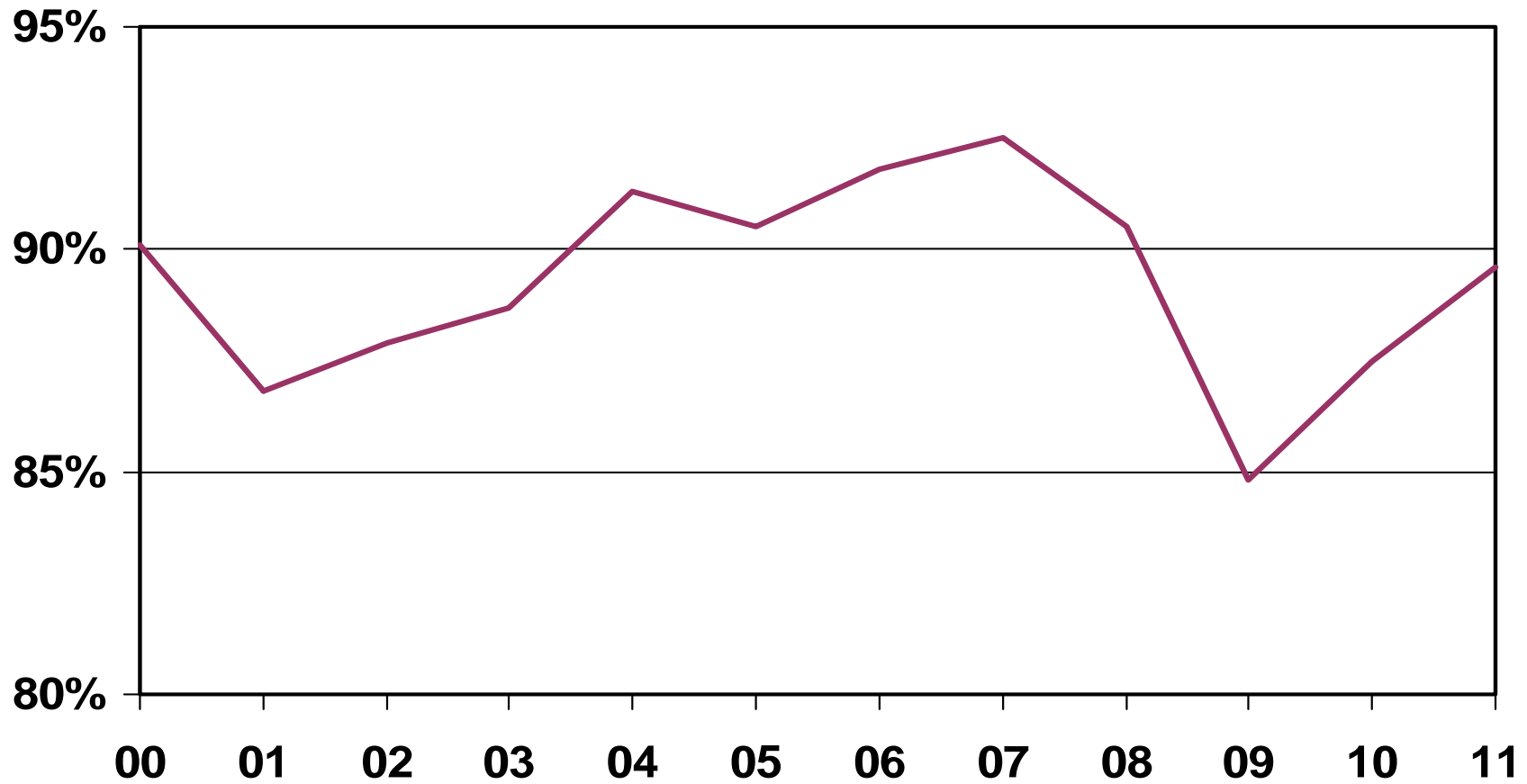
Investment in New Capacity Will Accelerate Over the Next Two Years

- ▶ Chinese Papermakers Back on the Expansion Trail
 - Access to Low-Interest Loans
 - Improved Outlook for Domestic Demand Growth

- ▶ Other Developing Regions Will Expand, Also
 - Indian Producers Announcing Many Projects
 - Middle East Looks Like Another Prime Area

- ▶ Improving Conditions in Developed World
 - Probably Just Mean Fewer Closures
 - Productivity Improvements Will Dominate Investments

World Paper and Board Operating Rates



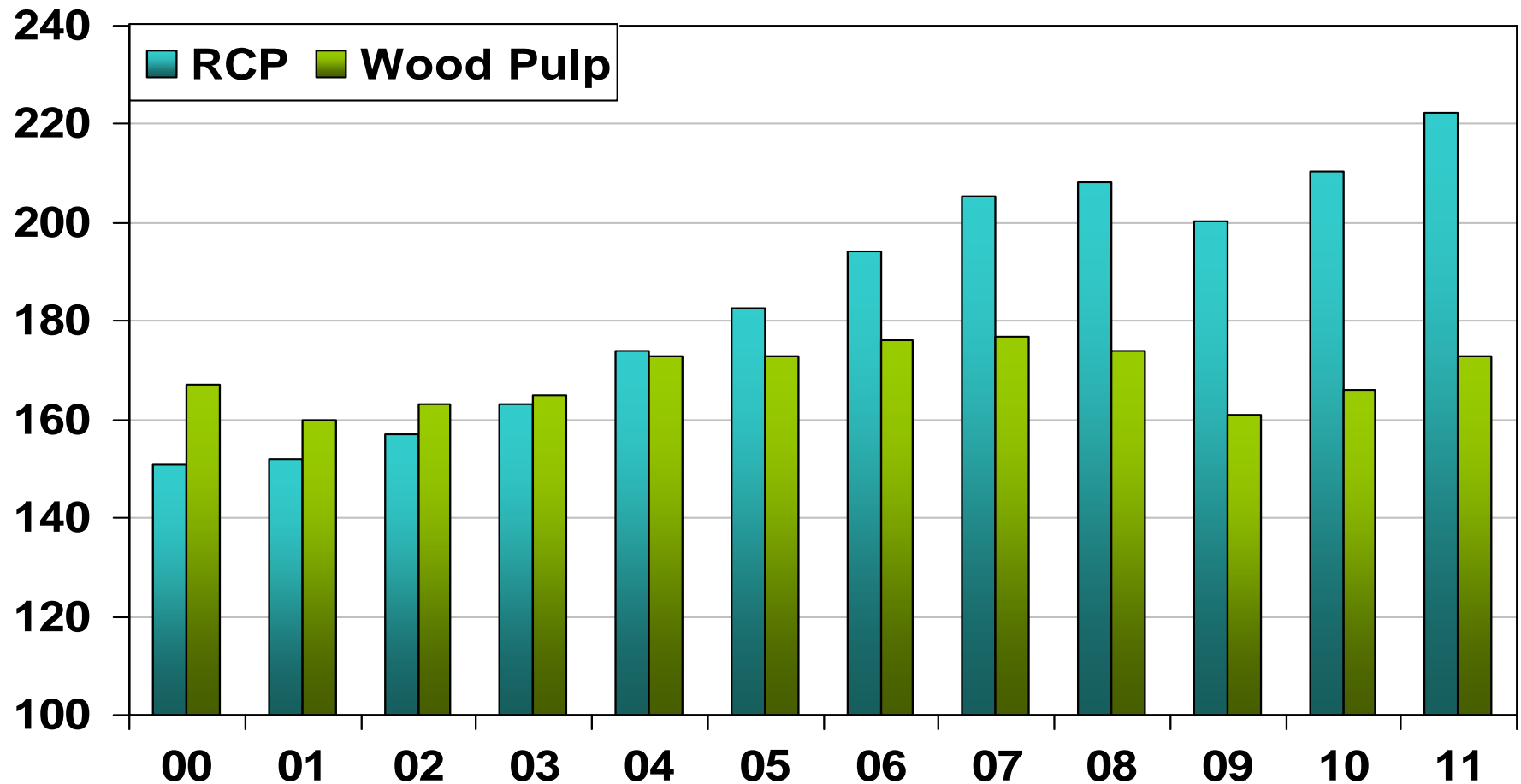
Usage of Recovered Paper Will Continue to Rise on a Worldwide Basis

- ▶ Most New Capacity Will be Based on Recovered Paper
 - Lower Capital Costs Associated with Recycled Products
 - Limited Supplies of Virgin Fiber in Developing World
 - Further Technological Improvements in Papermaking

- ▶ Wood Pulp Demand Limited by:
 - Poor Prospects for Graphic Grades, Which Tend to be Mainly Virgin-Based
 - Limited Growth in Developed-World Paper and Board Output

World Usage of Recovered Paper and Wood Pulp

Million Tonnes



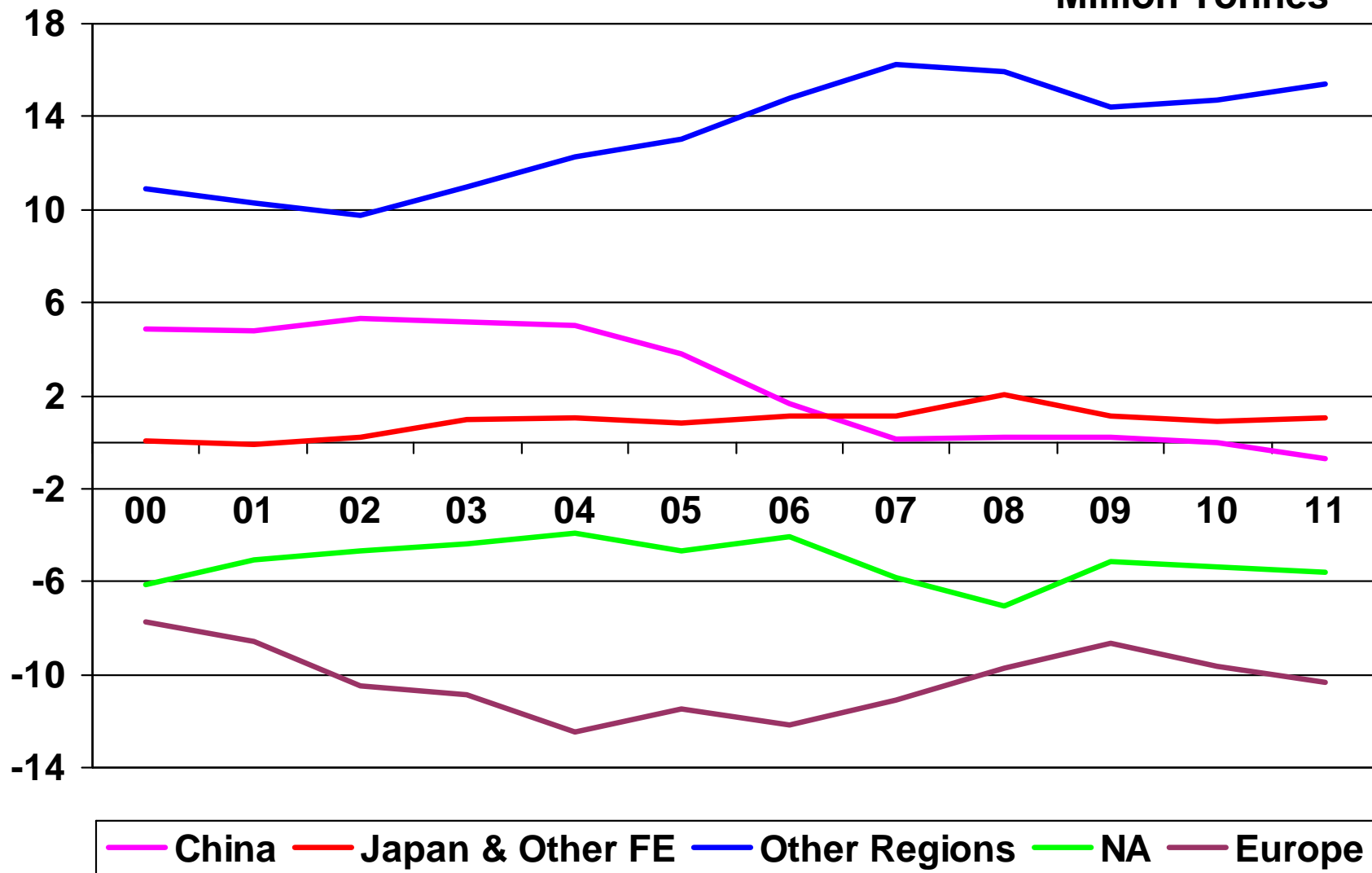
International Trade in Paper and Board Will Remain Limited Relative to Demand

- ▶ Growth in Regional Production Closely Matches Demand
 - Ability to Import Fiber, Especially Recovered Paper
 - Availability of New Technology
 - Availability of Financing for New Capacity
 - Opportunity to Buy Second-Hand Equipment

- ▶ Existing Capacity in Developed World Relatively Obsolete
 - Especially Compared to New Capacity in Developing World
 - Comparatively High Costs, Especially Adding in Transport

Net Paper and Board Trade for Major World Regions

Million Tonnes

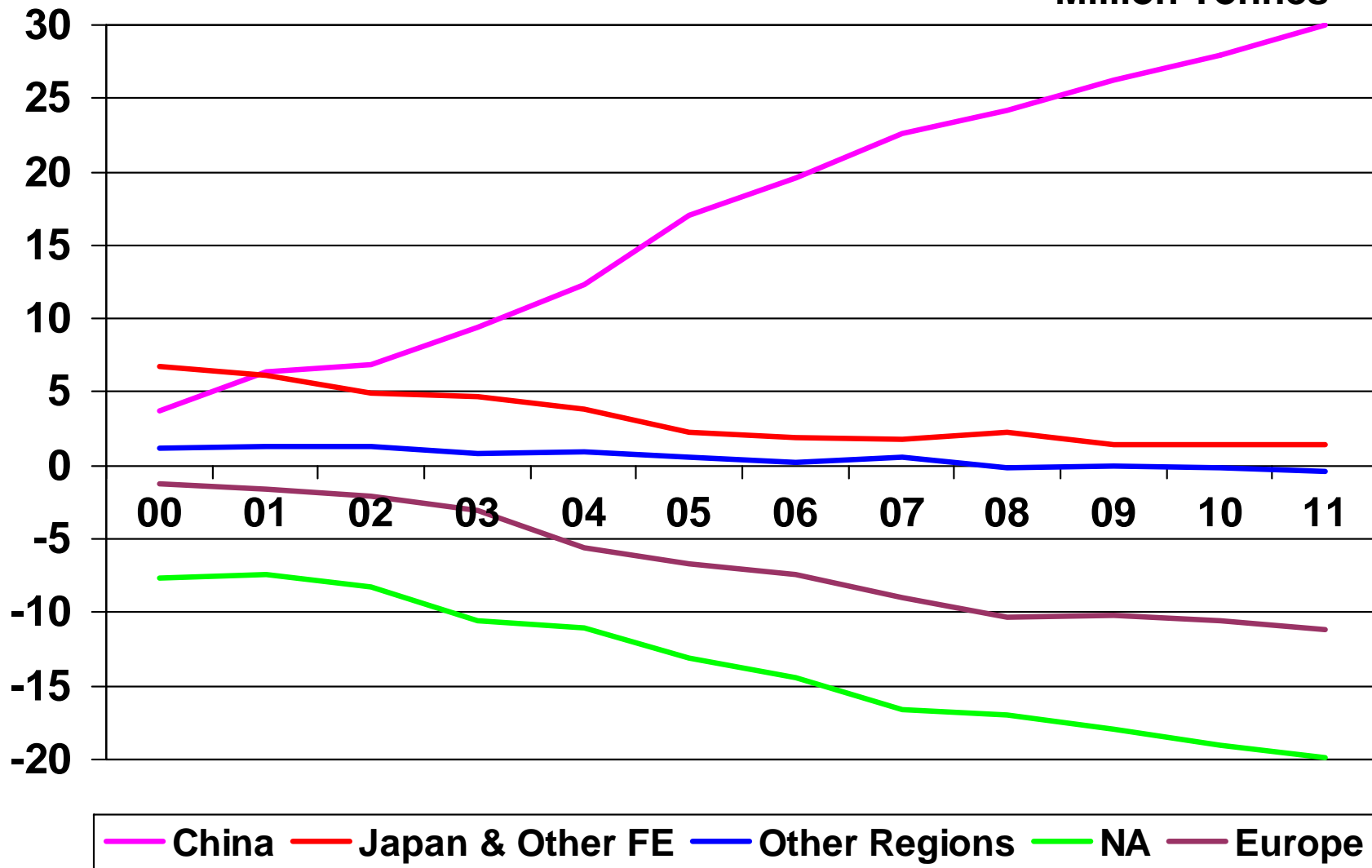


International Trade in Fiber Will Continue to Expand at a Rapid Pace

- ▶ Much of the New Paper and Board Capacity in the Developing World Will be Based on Imported Fiber
 - Lack of Domestically-Available Fiber
 - High Capital Costs for New Wood Pulp Capacity
 - Availability of Relatively Low-Cost Imported Fiber
- ▶ China Will Generate Most of the Import Demand
 - Developed World Will be Called on to Supply More Recovered Paper
 - South America Will be the Focus of Wood Pulp Exports

Net Trade for Major World Regions in Recovered Paper

Million Tonnes



Summary

- ▶ World Paper and Board Market Starting to Emerge from First-Half 2009 Plunge
 - Led by Resurgent Chinese Demand
- ▶ World Paper Demand Will Rebound in 2010-2011
 - Containerboard and Tissue Showing Best Performances
- ▶ Capacity Expansion Accelerates Again
 - Focused on China and Recycled Grades
- ▶ International Trade Will be Focused on Fiber
 - With China Being the Focal Point