

Valuation
Transaction
Consulting
Real Estate
Advisory
Fixed Asset
Management

Managing Property Valuation Issues in Today's Economy

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Presentation Overview

- Property valuation – Why?
- Initial diagnostic review of property values
- Property valuation resources
- Trending fixed asset records
- Valuation solutions and engaging a valuation consultant



Property Valuation – Why?



Property Valuation, Why?

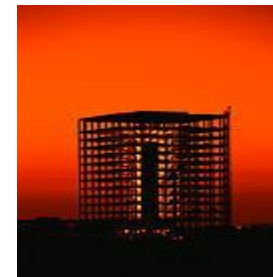
Questions that you need to ask yourself:

- Are you confident that your statement of values accurately reports all of your insurable property?
- Have you kept pace with the change in assets within your facilities?
- Do you know where your properties' reported insurable values come from?
- How well was your statement of values received when last marketed, did you receive push back from underwriters?



Property Valuation - Appraisal Benefits

- Determine the adequacy of insurance coverage
 - Complete property listing
 - Accuracy of values
- Improved risk management
 - Consistent approach to quantification of risk
- Improved marketability to underwriters
- Basis for equitable allocation of premiums
- Basis for preparation of a “proof-of-loss”
- Partnership – Insured/Insurer



Initial Diagnostic Review of Property Values



Initial Diagnostic Review of Property Values

- What's the source of your current property listing and values?
 - Appraisal
 - Trended historical costs
 - Standardized property values worksheets
 - Staff estimates
 - Market values
 - Don't know!
- **Is the property listing accurate?**
- **How old are the values?**



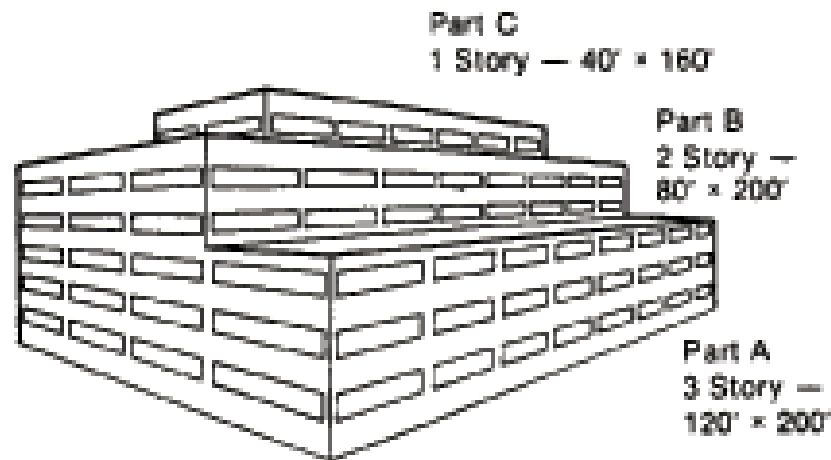
Analysis of Values

- Analyze property values by:
 - Occupancy:
 - Office, manufacturing, warehouse, utilities, etc.
 - Use gross area (square foot) as a basis of comparison:
 - Exterior wall to exterior wall; include basements, parking, common areas, etc.
 - Develop \$/SqFt for buildings and contents
 - Use process capacity as a basis of comparison where appropriate:
 - \$/Units/day; \$/MW; etc



Area Calculation

Gross floor area example:



6-Story Building, Varying Sizes

Part A: Three-Stories	120 ft. x 200 ft.		
		$24,000 \times 3$	$= 72,000 \text{ SF}$
Part B: Two-Stories	80 ft. x 200 ft.		
		$16,000 \times 2$	$= 32,000 \text{ SF}$
Part C: One-Story	40 ft. x 160 ft.		
		$6,400 \times 1$	$= 6,400 \text{ SF}$
GROSS FLOOR AREA			$= 110,400 \text{ SF}$



Cost/SqFt Comparison

- Replacement costs should be similar, if not, why not (buildings)?
 - Historic V's Modern construction
 - Architecturally significant V's plain-Jane
 - High quality materials V's low cost/quality
 - Large V's Small building
 - Replacement V's Reconstruction cost basis
- Replacement costs should be similar, if not, why not (contents)?
 - Mixed occupancy
 - Occupancy density
 - Change in occupancy
 - Manufacturing / Warehouse / Office ratios



Property Valuation Resources: Trends and Construction Costs



Current Cost Trends – Construction

- 1986 – 2003 (1% - 3% per year).
- Significant construction inflation in 2004 (10.5%)
- Slowing but not back to normal in 2005 (5.5% – 6.5%)
- Mixed indicators in 2006 (5.6% – 8.0%)
- A definite slowing in 2007 (2.8% - 4.7%)
- Commodities cause increases in 2008 (6.7 – 7.2%)
- Most recent 12 months
 - FM Global -0.3% (January 2009 – January 2010)
 - RS Means -0.5% (January 2009 – January 2010)
 - Marshall & Swift -7.0% (January 2009 – January 2010)
- **35% Inflation in 5 years!!!!!!!**

Sources cited:

Engineering News Record – Monthly Construction Economics Report, Building Cost Index

FM Global – Industrial Cost Trends, United States Industrial Building Average

RS Means – 30 City Average Construction Cost Index;

Marshall & Swift – Quarterly Cost Index



Current Cost Trends – Construction

US Bureau of Labor Statistics, Producer Prices Indices

- Construction cost increases, December 2008 – December 2009
 - Industrial Buildings -4.3%
 - Schools -2.4%
 - Offices -3.1%
 - Warehouses -4.3%



Sources cited:

U.S. Department of Labor, Bureau of Labor Statistics - Producer Price Index (most recent four months are provisional)



Construction Trends - 2010 and Beyond

Where are construction costs headed in 2010?

- ENR's 4th Quarter 2009 cost report suggests the following:
 - Continued pressure on labor costs
 - Non-residential building starts to fall another 2%, following a 30% decline in 2009
 - Structural steel prices to decline 4.0 – 5.0%
 - Lumber prices to increase 5.0% due to increase in residential construction
 - Construction inflation will be in the range of 1.3% to 2.3% for 2010.



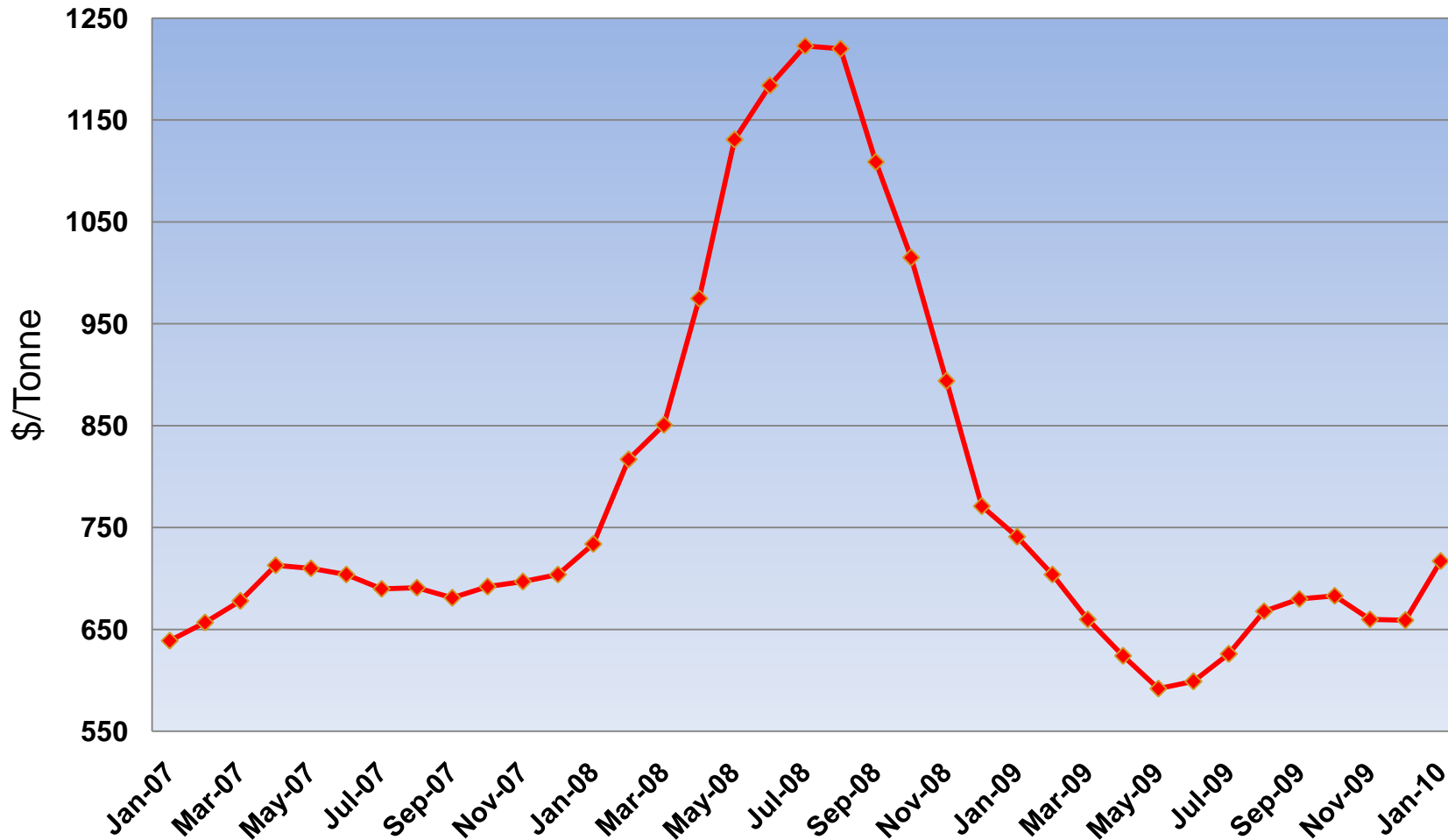
Sources cited:

Engineering News Record – Quarterly Cost Report, 4th Quarter 2009



Construction Trends - 2010 and Beyond

Composite Carbon Steel Price, US Average



Sources cited:
MEPS (International), Ltd, World Steel Prices



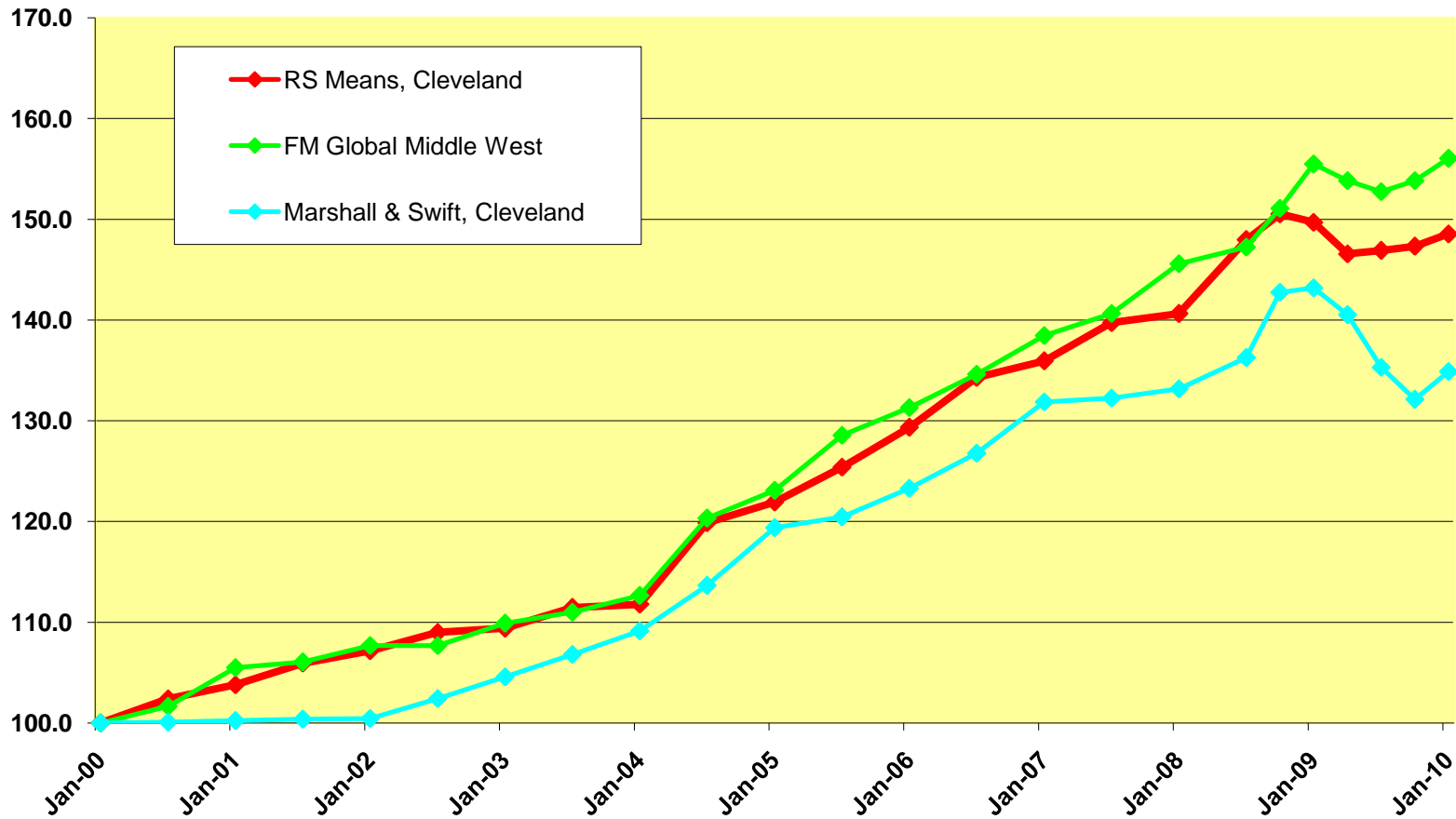
Cost Trend Resources, Construction

- United States Construction:
 - Marshall & Swift
 - <http://www.marshallswift.com/>
 - R.S. Means
 - <http://www.rsmeans.com/>
 - FM Global
 - <http://www.fmglobal.com/fmglobalregistration/>
 - Engineering News Record
 - <http://enr.construction.com/Default.asp>
- International Cost Trends:
 - FM Global – International Cost Trends
 - <http://www.fmglobal.com/fmglobalregistration/Downloads.aspx>
 - National statistical offices
 - <http://www.ssb.no/english/links/>



Inflation: Construction Cost Trends

Cleveland Area Construction Cost Indices



Sources cited:

RS Means – Quarterly Construction Cost Trends, Cleveland
FM Global – Industrial Cost Trends, Middle West Industrial Building Average
Marshall & Swift – Marshall Valuation Service, Cleveland



Cost Trend Resources, Equipment

- United States Equipment:
 - Marshall & Swift
 - FM Global
 - US Dept. of Labor, Bureau of Labor Statistics
 - <http://data.bls.gov/PDQ/outside.jsp?survey=wp>
 - Handy Whitman – Index of Public Utility Construction Costs
 - Nelson Farrar – Refinery Indices
 - Oil & Gas Journal



Inflation: Equipment Cost Trends (continued)

Equipment Inflationary Increases, 2007 – 2010

Machinery & Equipment Cost Trends



	2007	2008	Most Recent 12 months
Marshall & Swift – Ind. Average	3.40%	6.3%	-2.7% Jan. '10
FM Global – Industrial Equipment Composite	1.90%	5.1%	0.0% Jan. '10
BLS-PPI Capital Equipment	1.30%	4.0%	0.0% Dec. '09

- Currency fluctuations are creating new replacement cost realities for imported machinery and equipment

Sources cited:

Marshall Valuation Service - Marshall & Swift Quarterly Cost Index, industrial Equipment Average of All

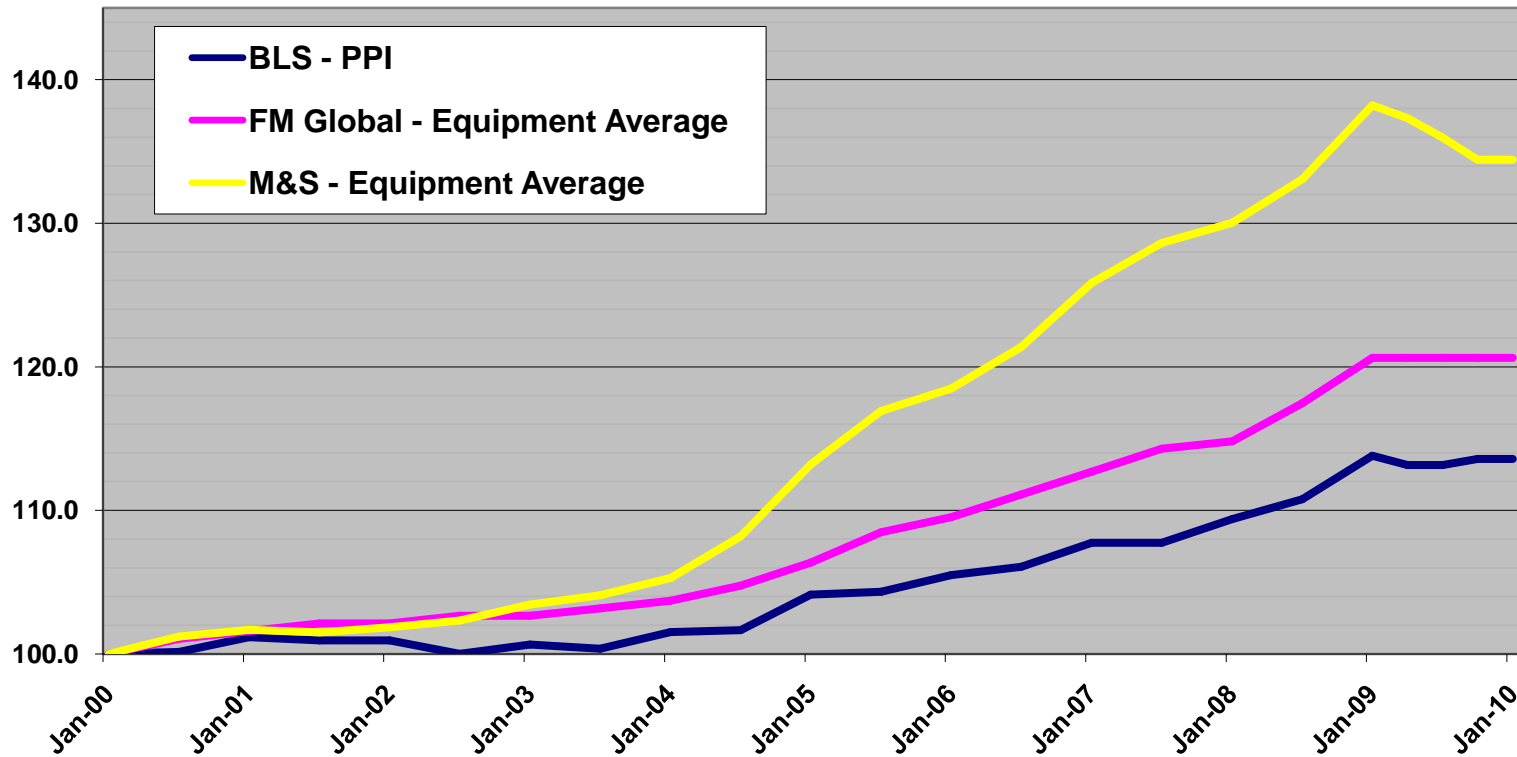
FM Global – Industrial Cost Trends, Industrial Equipment Composite

U.S. Department of Labor, Bureau of Labor Statistics - Producer Price Index, Capital Equipment - Table WPUSOP3200



Inflation: Equipment Cost Trends (continued)

Equipment Cost Indices - Increases 2000 to January 2010



Sources cited:

M&S: Marshal Valuation Service - Marshall & Swift Quarterly Cost Index, Industrial Equipment Average of All

FM: FM Global – Industrial Cost Trends, Industrial Equipment Composite

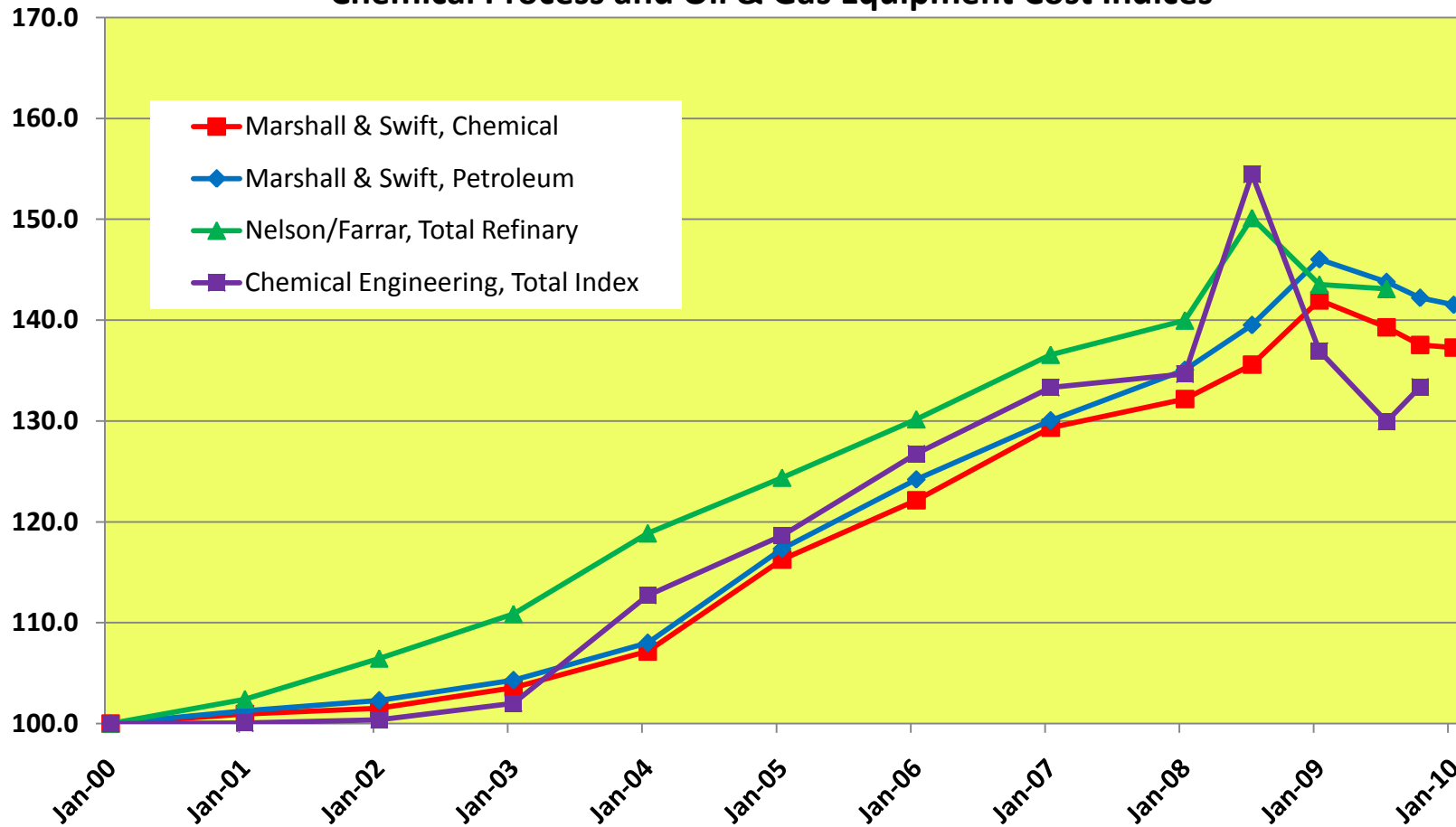
PPI: U.S. Department of Labor, Bureau of Labor Statistics - Producer Price Index, Finished Goods Seasonally

Adjusted - Table WPSSOP3200



Inflation: Equipment Cost Trends

Chemical Process and Oil & Gas Equipment Cost Indices



Sources cited:

M&S: Marshal Valuation Service - Marshall & Swift Quarterly Cost Index, Chemical & Petroleum Equipment Indices

Oil & Gas Journal, Nelson/Farrar total refinery index

Chemical Engineering Magazine, Chemical equipment total index



Property Valuation Resources

- Inflation Reality Check
- Which country has a current annual inflation rate of?

231,000,000%

Zimbabwe



Source: BBC World News, October 9, 2008

Property Valuation Resources

- Construction Cost Information (US)
 - R. S. Means
 - Marshall & Swift
 - Design Cost Data
- Construction Cost Information – International
 - Engineering News Record
 - <http://enr.construction.com/Default.asp>
 - Gardiner & Theobald
 - <http://www.gardiner.com/economics.asp>
 - Faithfull+Gould & RS Means
 - <http://www.fgould.com/publications>



Trending Fixed Asset Records



Trending Fixed Asset Records

- Identify insurable property
 - No land or site development costs
- Site improvements?
- Trends are not an absolute
- Fixed assets diverge from reality eventually
- Don't trend:
 - Used costs
 - Allocated costs
 - Internal transfer costs
- Renovations/Rebuilds



Trending Fixed Asset Records

- Expensed items
- Non-US sourced assets
- Transferred assets
- Allocate assets to individual buildings
- Property of others
- Offsite assets
- Don't trend longer than 7 – 10 years



Valuation Solutions and Engaging a Valuation Consultant



Valuation Solutions

Appraisal Programmes:

- Identification of high priority sites
 - Based on value
 - Risk profile
 - Degree of confidence in existing values
- Sample sites by occupancy / product
- Sample sites by region
- Appraise specific number of sites per year
- Builds database for site comparison
- Update prior appraised sites by trending, limit 5 to 7 years



Valuation Solutions

Appraisal Programmes:

Buildings – site inspection

- Review of available as-built plans
- Measuring of dimensions
- Determination of primary construction components
- Building services, interior and exterior finishes, etc.
- Photographing each building
- Replacement cost developed using local construction cost resources
- Values and (COPE data if required) reported by building
- Land improvements (if required) – parking lots, signage, outdoor lighting, etc.

We do not recommend trending building costs as:

- High probability of capitalised renovations, results in excessive replacement cost
- Unable to breakout original costs by individual building





Sample Manufacturing
City, Wisconsin

SITE: 001 SAMPLE MANUFACTURING
BUILDING: 001 MANUFACTURING BLDG

STREET ADDRESS
CITY, WI 12345



Valuation Summary

Date of Inspection: 09/12/2007

BUILDING COST OF REPRODUCTION NEW **\$17,101,000** (\$ 59.63 per SF)

Construction Components

System ID: 1

ISO Class: 3 - NON-COMBUSTIBLE (33 %), 6 - FIRE RESISTIVE (67 %)
 Exterior Wall Type: BRICK, ON FRAME (1 %) , CONCRETE TILT-UP PANELS (33 %) , CONCRETE BLOCK (19 %) , INSULATED SANDWICH PANELS (47 %)
 Heating: ROOFTOP UNIT (HEATING) (100 %)
 Cooling: ROOFTOP UNIT (COOLING) (2 %)
 Roof Material: SINGLE-PLY MEMBRANE (100 %)
 Roof Pitch: FLAT (10 %) , LOW (2:12 TO 8:12 PITCH) (90 %)
 Elevators: Passenger: 0 Freight: 0

Description

Year Built: 1991
 Number of Stories: 1
 Average Story Height: 29 FEET
 Square Footage: Super Structure: 286,790
 Sub Structure: 0
 Total: 286,790

Construction Square Feet

NON-COMBUSTIBLE	33 %	94,841
FIRE RESISTIVE	67 %	192,149

Protection

Manual Fire Alarm: Y
 Automatic Fire Alarm: Y
 Sprinklers: Y
 Entry Alarm: Y
 Fire Dept Paid/Volunt.:
 Protection Class:

Miscellaneous Additional Features

240 LF CRANEWAYS @ \$115/LF ; DOCK LEVELERS

Exposure

Latitude:	Earthquake Risk:
Longitude:	Seismic:
Flood Zone:	Portable:
Flood Zone Certificate:	Historical Register National:
BFE:	Historical Register State:
Distance To Coast:	Historical Register Other:

Valuation Services – Equipment Valuation

- Inspection of pertinent data
 - Make and model
 - Quantity
 - Software configurations
 - Technological upgrades
 - Components



Credentials

- Professional Accreditation
- Experience in your industry
- Experienced Full-Time Consultants
- Uniform Standards of Professional Appraisal Practice (USPAP) Compliant Reports
- Internal Quality Review / Controls



Valuation Services – Quote Requirements

Size and Scope of valuation services

- Property details
 - Size (total SqFt, SqM)
 - Occupancy/Product
 - Number of buildings on site
 - Sketch/Plot plan
 - Major plant items and capacities
 - Loss prevention report
- Asset description requirements for client/underwriter/broker
 - Asset level detail
 - Single value for all assets within each building



Summary Points

- Benefits –
 - Improved Risk Management
- Diagnostic Review
 - Are your present values reasonable?
- Cost Trends
 - Construction cost trend uncertainty
 - Equipment cost increases returning to normal
- Valuation Solutions and Engaging a Valuation Consultant
 - Be an informed purchaser, customize your scope



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