### **Conference Summary**

# Senior Chemical Executive Conference - "Strategic, Financial and Shareholder Issues For Chemical Executives" - November 19, 2013 The Yale Club of New York City

The Yale Club of New York City		
	11:30 a.m.	Registration – Trumbull Room
	12:00 p.m.	Welcoming Comments and Luncheon Peter Young, President and Managing Director, Young & Partners
	12:15 p.m.	Luncheon Keynote Speaker and Fireside Chat
		The Current and Future Impact of Shale Gas on the Global Chemical Industry Calvin M. Dooley, President & CEO, American Chemistry Council
		A Fireside Chat with Calvin Dooley Peter Young, President and Managing Director, Young & Partners Calvin M. Dooley, President & CEO, American Chemistry Council
	1:15 p.m.	The State of the Chemical Industry: Strategic, M&A and Financial Peter Young, President and Managing Director, Young & Partners
	2:00 p.m.	The Art of Managing Specialties in the Current Environment Craig A. Rogerson, Chairman and CEO, Chemtura Corporation
	2:45 p.m.	The Evolving Global Petrochemical Landscape Dewey Johnson, Vice President for Petrochemicals and Feedstocks, <i>IHS Chemical</i>
	3:30 p.m.	The Evolving Roles and Strategies of Private Equity Tom Kichler, Managing Director, One Equity Partners Scott M. Wolff, Managing Director, American Securities
	4:30 p.m.	<u>Speaker Roundtable</u> Moderator: Peter Young, President and Managing Director, <i>Young &amp; Partners</i> Participants: Conference Speakers
	5:30 p.m.	Cocktail Reception - Trumbull Room

7:00 p.m.

**End of Conference** 

### The Current and Future Impact of Shale Gas on the Global Chemical Industry

CALVIN M. DOOLEY President & CEO, American Chemistry Council

When I first came on board at the American Chemistry Council in 2008, I spent some time, as is customary, speaking with leaders in the chemical industry and members of the Council's board of directors. Looking back



on that tour, I can say definitively that none of the CEOs were, at the time, considering making major new chemical manufacturing investments in the United States. We were coming off a decade where we saw a decline in the global competitiveness of the U.S. chemical manufacturing sector and an almost 20% decline in the domestic workforce within the industry. As many of you are aware, since 2008 there has been a dramatic turn of events. When I go out and meet with the leaders representing those same companies today, almost without exception, each and every one of them will discuss the prospects of making major new investments in chemical manufacturing in the U.S. This sea change in confidence and activity among industry firms can really be attributed to one thing: shale gas.

There is no other sector in the economy, in my opinion, that is better positioned to capitalize on the increased supplies of natural gas in the U.S. than the chemical industry. It is my job and the job of the ACC to inform and educate legislators and their constituents about the economic and environemental benefits of natural gas and the unique opportunities we have in the U.S. to take advantage of those benefits.

We at the ACC released a report in March, which has been subsequently updated, which seeks to measure the economic benefits of U.S. chemical industry projects, including potential new facilities, new jobs, and resulting increases in U.S. GDP and tax revenue. As of November 6<sup>th</sup>, we had identified 135 new projects which constitute about \$90-100 billion in potential capital investment. This is up from 97 projects making up a potential \$72 billion in investment since just March of this year. As a result of the large supply of natural gas here in the U.S., the chemical industry is uniquely positioned to not outsource production or investments abroad and to actually insource investments and production. Of the aforementioned \$90-100 billion in investment, over half is coming from foreign direct investments. The ACC expects that additional output from shale related investments will generate about \$67 billion in new chemical industry shipments by 2020.

While there is a lot of positive data out there regarding the shale gas revolution, the NGO community does continue to question whether the supply projected by many consulting and advocacy firms is sustainable or too optimistic given the recent decline in the production of shale gas. In response to that we cite an IHS study which shows that we have here in the U.S. a 30-year supply of natural gas that can be profitably extracted at \$4 per million BTUs or less.

Expanding upon the benefits of natural gas unique to the U.S. chemical industry requires a discussion of the different forms of the feedstock. The U.S. chemical manufacturing industry benefits from natural gas liquids. Almost 85% of the feedstocks we use in the U.S. are based on natural gas liquids, ethane. About 75% of the feedstocks used outside of the U.S. are oil-based, naphtha. Historically the two feedstocks had been in a near competitive equilibrium in terms of pricing such that companies using the feedstocks were indifferent about sourcing their feedstock as either oil based, naphtha, or natural gas based, ethane, if the price differential was about 7 to 1, respectively. Today that ratio is about 30 to 1 in favor of natural gas and IHS expects this favorable dynamic to persist for quite some time. IHS expects NGL production to double by 2020 and ethane supplies to quadruple by 2025.

If you focus on the relative competitive position of the United States in terms of petrochemical production costs and how it has changed over the last 5-10 years, what you will see is the product of the shift in the ratio of feedstock prices I previously mentioned. In 2005 the U.S. was one of the highest cost producers of chemicals and thus most of the investment in chemical manufacturing at the time was focused in areas outside of the U.S. Today we are one of the lowest cost producers of chemicals, possibly just behind the Middle East region. If we focus for a minute specifically on the competitive dynamic which exists between North America and Western Europe in terms of chemical and plastic production, data from IHS show that North America is poised to capture significant market share from Western Europe in the near future. IHS expects North American chemicals and plastics production to double while Western Europe's falls by one third by 2020.

Looking down the value chain at the intermediate products produced using ethane, such as PVC, vinyl chloride, ethylene glycol, styrene, and polystyrene, we can see that several different industries are benefitting or will benefit from the low price of natural gas in the U.S. Those industries include household products, construction and industrial, food packaging, clothing, and automotive. Going now beyond the downstream producers, the shale gas "revolution" is having and will continue to have broad positive implications for the U.S. macro economy. As a result of the abundance of low cost natural gas in the U.S., IHS expects disposable household income to increase \$3,500, nearly 4 million jobs to be supported, and \$180 billion in real net trade to be added to the economy each year, all by about 2025. In addition, we at the ACC expect 537,000 new permanent jobs, \$201 billion in new U.S. economic output, and \$14 billion in new, permanent federal, state and local tax revenue by 2020 due to increased chemical industry investment.

At the ACC we support a national energy strategy that develops all of our energy resources. Today, though, we have focused on the potential of shale gas to revolutionize the U.S. chemical manufacturing sector's competitive position in the global economy. All of what I have talked about here today can be possible provided lawmakers get the regulatory policy right. We at the ACC believe that the key policy initiatives necessary to ensure we realize the full potential of our access to shale gas include allowing access to natural gas reserves on both government and private lands, ensuring reliable infrastructure to transport supplies, implementing responsible state-based regulations that avoid undue restrictions on natural gas supplies, and maintaining accelerated depreciation in tax policy.

### <u>Fireside Chat with Calvin Dooley - Selected Comments</u>

PETER YOUNG,
President and Managing Director, Young & Partners
CALVIN M. DOOLEY
President & CEO, American Chemistry Council

<u>Peter Young:</u> As you look at the regulatory landscape in the U.S. and abroad, what do you think the key issues and changes are that the chemical industry should be prepared to deal with going forward?

<u>Cal Dooley</u>: I think that the major challenge that we face both domestically and globally as an industry is ensuring that there is a risk-based and a science-based assessment of the safety of chemicals for their intended use. As an industry, domestically, we are committed and obligated to ensure that our chemicals that go into any product are safe in terms of exposure. We have seen, however, a lot of other countries, even in the EU with their REACH program, adopting provisions which take more of a hazard-based approach which focuses on the level of certain chemicals within a product as opposed to a living thing's potential exposure to those chemicals. The EU also has spent an incredible amount of resources to try to ensure that other countries and international bodies also embrace this more hazard-based approach, and it is incumbent upon the U.S. to demonstrate that there is a better alternative to this approach. There is a regulatory assessment alternative which will demonstrate the safety of chemicals in commerce without stifling innovation. We at the ACC would also like to see the international regulatory bodies streamline or harmonize their different sets of rules so as to decrease the burden placed on international chemical companies of having to comply with a variety of safety standards, which can stifle commerce.

<u>Peter Young:</u> How would you characterize the U.S. in terms of competitiveness in the chemical industry outside of having access to inexpensive feedstock made available by the abundance of shale gas? For example, in the pharmaceutical intermediates business, the U.S. is increasingly impacted by more and more competition appearing in India and other parts of Asia.

<u>Cal Dooley:</u> We have many members who are multinationals not based in the U.S. A few of those companies are in India and Brazil, South Africa, etc. When they look at the alternative investment opportunities they have, in geographies outside of the U.S. they see many other weaknesses besides simply the disadvantaged raw material and energy cost position due to the abundance of shale gas in the U.S. One of those weaknesses is regulatory certainty. Even though we here in the U.S. sometimes feel that there may be overregulation in some industries, compared to other geographies, we have a relatively high degree of regulatory certainty which is important to consider when determining where to invest. In the U.S. we also have a significant level of and access to investment capital and an economy that is currently stable. Finally, the U.S. also has a relatively high level of domestic safety which is important when employing workers and running a stable business.

### The State of the Chemical Industry: Strategic, M&A and Financial

#### PETER YOUNG

President and Managing Director, Young & Partners

#### Global and Chemical Economic Performance

Although we have recovered from the global recession and near-collapse of the financial markets in 2008-2009, unstable economic and financial conditions persist.

The chemical industry has done far better. Although the global economic and financial crisis had a very negative impact on the chemical industry, the chemical industry recovery began in 2009 with strong industry product prices, volumes, capacity utilizations and margins. This was driven by a rebound in demand, the mothballing of capacity, and a slowing of capacity increases. With this combination, capacity utilization in commodity chemicals has been high. As a result, cash flows have been strong and many companies have been accumulating cash. On top of that, the dramatic increase in shale oil and gas supplies in the U.S. has benefited U.S. chemical companies in terms of reductions in both raw material and energy costs. European chemical operations have not fared as well given the economic problems in Europe. Going forward, the key issue is whether the fragile global economic and financial conditions remain stable or are negatively disrupted.

#### Stock Market

With regard to the stock market, the history of the relationship of the stock market to the chemical industry has always been a difficult one, with the industry severely undervalued for perhaps 7 years out of every 10 years, and overvalued in the remaining 3 years. The chemical industry has done well in recent times. For example, in the first three quarters of 2013 the chemical industry as a whole performed well on both a relative and an absolute basis.

Recently, there has been a surge in shareholder activist activity aimed at the chemical industry. Examples include American Pacific, Ferro, Air Products, Ashland Chemical and DuPont. Case by case, the companies have had to deal with the activist and have reacted in a number of ways. American Pacific has granted the activists seats on the board. Ferro has cut costs, sold off smaller non-core businesses and has fended off an offer from A. Schulman. Ashland has increased its dividend and share repurchases and has begun to sell off a number of businesses (elastomers and water technologies). Air Products has announced the retirement of their CEO. DuPont has announced that it will spin-off its performance chemicals division that represents \$7 billion of its revenues.

#### M&A Market

On an equity value basis, \$22 billion of deals greater than \$25 million in value were completed globally in the first three quarters of 2013. On an annualized basis, dollar volume is about 33% greater than last year's \$22 billion total. In terms of numbers of transactions, in the first three quarters of 2013 there were 59 deals completed compared to 46 deals completed in the first three quarters of 2012. This is about a 28% increase in the number of deals completed.

Although the market volume in the first three quarters has picked up in terms of the number of deals, the number of large deals is still subdued due to residual CEO concerns about global economic and financial uncertainties.

#### **Debt and Equity Financings**

There was a noticeable uptick in chemical industry debt financings in the first three quarters of 2013. Global non-bank debt financing was strong, with \$27.4 billion issued in the first three quarters of 2013 versus \$20.6 billion for the first three quarters of 2012. Investment grade debt totaled \$17.9 billion in the first three quarters of 2013 compared to \$9.9 billion for the first three quarters of 2012. High yield debt issuance remained elevated with \$9.5 billion issued in the first three quarters of 2013. This compares to \$10.7 billion issued in the first three quarters of 2012 and \$15.8 billion for all of 2012.

In the first three quarters of 2013, a mere \$5.5 billion of equity was issued as a result of 17 offerings by the chemical industry. The overall IPO market has been weak, but has improved recently. Coupled with the positive equity market performance of chemicals, there was a modest increase in chemical IPO activity. Four chemical company IPOs were completed in the first three quarters of 2013: Taminco, BioAmber, Evonik, and Marrone Bio Innovations.

#### Stock Market Outlook

The stock market has been modestly favoring the chemical industry due to the industry's strong earnings fundamentals and restrained capacity increases. The U.S. and European chemical industries are currently trading at a premium to the general market. It is unclear where the industry valuation is heading given the overall uncertainty in the economic and financial markets. Should global economic growth revive, we would expect chemicals to outperform the market. However, in an era of sluggish or no growth, the industry is likely to trade at a discount to the market.

#### M&A Market Outlook

Young & Partners believes there has been a recovery of the M&A market that will continue through the rest of 2013 and into 2014. Although we expect the number of deals to be strong and stable, global uncertainties and the problems in Europe will hold down the size of deals. Valuations will continue to improve from the 2012 trough for chemicals overall. Valuations continue to stay high for high quality businesses being sold.

#### Equity and Debt Market Outlook

Equity financing volume will likely continue to be modest given the market's historic bias against the chemical sector and the chemical sector's limited need for equity capital. If the general IPO market holds up, we expect to see a modest number of chemical IPOs in 2014, but moderate in size. High yield debt issuance will continue to be volatile, but relatively strong in the U.S and depressed in Europe.

#### Overall

What does this mean for the leaders in the chemical industry? It means that companies must find ways to take advantage of the stronger regions of the global economy and provide downside protection in the more troubled regions and against the low odds case of a broader global economic and financial downturn. Second, the current M&A market is presenting both buyers and sellers with a healthy, active market. Although it is neither a trough nor a peak period, the strengthened valuations overall present a solid opportunity to sell where there is a strategic or financial need to do so. Last, overall, along with internal cash flows, there is plenty of low cost debt capital and a selective amount of equity capital available to fund both growth and acquisitions.

### The Art of Managing Specialties in the Current Environment

CRAIG A. ROGERSON
President, Chairman and CEO, Chemtura Corporation

In my opinion, managing specialties really shouldn't be described as an art but instead as more of a science. Also, in managing specialties, what we are really trying to do is not so much manage, but create value. There is a lot of management involved in what we do and the management team is critical, however our ultimate goal is to create value.

Chemtura was formed in 2005 after a series of mergers and acquisitions, the last one in 2005 with the combination of Crompton and Great Lakes which formed what is now Chemtura. I joined Chemtura in late 2008 just before the company filed for bankruptcy protection. The company did emerge from bankruptcy about 19 months later by virtue of a very strong team which helped lead the company to a very strong performance during that period.

Today, Chemtura is a global specialty chemical company committed to global sustainability and engineering chemical solutions for customers' evolving needs. The company has a very diverse portfolio of products due to the combination of the various companies which came together to ultimately create Chemtura. Thus, for Chemtura, portfolio management has been and is a big part of creating value in specialty chemicals. The vision of Chemtura is like that of many other specialty chemical companies. What specialty chemical companies do and what defines them is their ability to solve problems for their customers.

Specialty chemical companies must focus on and proactively manage those things that they can control, such as building plants and investing in operations near customers, investing in research, innovation and process improvement, and managing the product portfolio. These companies must, on the other hand, seek only to effectively manage those things that the company cannot fully control, such as taxes, foreign exchange rates, and costs of raw materials.

One factor that contributes to specialty chemical companies' ability to serve and solve problems for their clients is operating in close proximity to those clients. So, while natural gas is a boon to North American chemical manufacturers in the form of a low cost feedstock, it does not necessarily have a huge positive impact on serving foreign customers because we can't produce all of our products in North America and ship them to our customers overseas. We need to have operations close to those customers overseas in order to understand their needs and to be able to quickly address those needs. At Chemtura we are making major investments in areas such as Nantong, China in order to do just that. This is an important concept as we seek to ultimately create value because certain areas around the globe are experiencing more economic growth than others and we need to serve and grow with our customers in those regions.

Another important factor in creating value within the specialty chemicals realm is innovation. We at Chemtura seek to have 30% of revenues come from products less than or equal to 5 years old. Constantly innovating and anticipating customer needs is the only way to provide significant value to the customers of specialty chemical companies such as ours. Chemtura has focused heavily on the common theme of sustainability or "greener" products and applications throughout most of our product lines. This type of innovation and a push to have a significant portion of company revenues consistently coming from newer products should ultimately lead to higher profit margins and increased value for our shareholders.

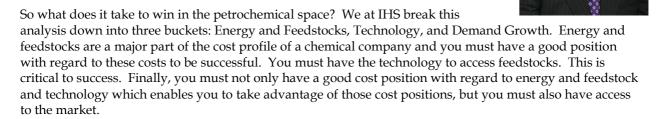
The final element of value creation in the specialty chemicals world that I want to speak about today is active portfolio management. What I mean by portfolio management, or at least what I mean by the phrase as we sit here today, is buying and selling. Companies must actively manage their businesses or product lines in order to maximize shareholder value. This means focusing where the company can win or really playing to the relative strengths and competitive advantages of the firm and divesting those assets or businesses where the company does not have strengths or does not have an advantage over its competitors. This also means selectively acquiring businesses where you have an advantage or strength in order to accelerate value creation. At Chemtura we have been actively managing our portfolio in order to create value for our shareholders and to that end we have divested our PVC additives business, acquired 100% of DayStar Materials, divested our antioxidants business, announced the pending acquisition of Solaris and announced the pending sale of our Consumer business.

### **The Evolving Global Petrochemical Landscape**

**DEWEY JOHNSON** 

Vice President for Petrochemicals and Feedstocks, IHS Chemical

I will discuss the petrochemical landscape, the major trends within the space and what the future looks like for the petrochemical industry. I want to talk about low cost feedstocks and innovation and what those two items mean for the upcoming wave of investments and earnings for chemical companies.



As has been mentioned several times today, there is a new wave of investment by players in the petrochemical space currently underway. Globally, actual planned and anticipated investment from 2001 to 2022 is expected to be above \$800 billion. The primary investment geographies today are U.S., Middle East, and North East Asia. Investments are primarily driven by cost advantage and/or proximity to demand centers. In the U.S. alone, we expect annual investment to reach above \$10 billion per year between 2015 and 2019. Overall investment is strong, the U.S. sits in a very strong position to benefit from a feedstock cost advantage, and global chemical profitability looks to be on the uptick.

If you take a look at the chemical industry building blocks which include chlorine, ethylene, propylene, methanol and benzene with regard to capacity you will see that ethylene is the largest of those building blocks, and that ethylene, propylene, and methanol are expanding at a rapid pace. This is very much driven by the abundance of shale gas in North America. In terms of the feedstocks used to create these building blocks, we really see a three participant race between oil/naphtha, natural gas/ natural gas liquids, and Chinese coal. Our cost forecast for Brent crude is about \$16 per million Btu, for U.S. natural gas (Henry Hub) we expect about \$4 per million Btu, and for China coal about \$5 per million Btu. We do believe that ethane will oscillate in dollars per million Btu between oil and natural gas. We at IHS do see the U.S. natural gas price advantage persisting in the long term. One thing to point out is that while China coal is extremely cheap, it is located primarily in inland China, making it more expensive to those users who are outside of inland China after one factors in transport costs.

There have been massive innovations and technology improvements within the petrochemical space over the last 100 years and some of the most extreme instances have only just occurred within the last 10 to 15 years. In the early 2000s, of course, we saw the emergence of hydrofracking and, more recently, the commercialization of coal to methanol and olefins processing. So we are seeing somewhat of a renaissance in the interface between energy and chemicals. The innovation in the space is significantly changing the global trade environment and we expect shale gas and other unconventional methods of production to continue to gain share of production while conventional methods lose share. This dynamic is going to greatly benefit North America and will also have a positive impact on China given its supply of coal and new coal to olefins technology. However, with regard to China, there are many constraints and issues with the coal to olefin processing. The coal to olefin process has a very large carbon footprint and requires a significant amount of water which is at a premium in inland China.

### The Evolving Roles and Strategies of Private Equity

#### TOM KICHLER

Managing Director, One Equity Partners

Today I will go over what is happening in the M&A market currently, what is on the horizon for the market, and also seek to answer a few questions about the role of private equity. Does private equity matter? I think so and I will seek to answer that question. Can private equity continue to win? I hope so and I will also attempt to explain why the answer to that question is yes.



First though, I would like to give a short background on my firm. Who is One Equity Partners? One Equity Partners has invested approximately \$1.5 billion in equity in the chemicals and specialty materials sectors over nine transactions. These two industries make up our single largest area of investment. We have a track record in the chemical M&A industry of realized investments and have seven realizations which have yielded a multiple of invested capital greater than 3 times and an average IRR of greater than 80%. A few factors we believe have contributed to our success include building companies with a purpose, backing strong management teams, and using modest leverage in order to withstand negative cycles.

There has been a solid recovery in the global M&A market from 2012 to 2013. I would characterize the M&A market specifically within the chemicals sector over the last two years or so as moderately active.

Financial sponsors have been and continue to be major players within the chemical M&A market. For deals over \$300 million in size, my analysis shows that over the last 3 years about a quarter of all buyers and about a third of all sellers have been financial sponsors. Private equity firms such as Bain, AEA, and Apollo have had great success in the chemical industry and thus the sector continues to be popular among many financial sponsors.

As I look into my crystal ball and attempt to see what the future holds for private equity firms in the chemicals space, I do believe they can still compete and win. However, it does appear that winning may become more challenging. Chemical company valuations are extremely high and debt will not be this cheap forever. This will put pressure on financial sponsors' projected returns and thus their ability to pay a price that is acceptable to owners of chemical companies.

Financial sponsors can and will continue to win though if they concentrate on investing with an industrial purpose, if they resist the urge to overpay, and if they ensure that they back or create superior management teams. Financial sponsors have certain advantages which allow them to do these things better than public or other non-sponsor owned firms. Private equity portfolio companies have the advantage of being able to invest with a long term focus free from the quarterly reporting and budgeting exercises that non-sponsor owned firms may be subject to. This allows for a sponsor to execute a longer term roll-up or combination strategy and potentially extract value from synergies. Private equity owners can also pay management better than many non-sponsor owned firms allowing for building of an optimal leadership team.

### The Evolving Roles and Strategies of Private Equity

SCOTT M. WOLFF Managing Director, American Securities

Today I would like to give you all a brief overview of American Securities, who we are, some of the transactions we have done in the chemicals space, and some of the themes and trends we are focused on in terms of M&A opportunities in that space today.

The mission of our firm, similar to that of many private equity firms, is to generate superior returns by making investments in great businesses and to help



existing management teams improve those businesses. We strive to do this via a number of key values. We truly strive to maintain the highest personal and corporate ethics and to be respectful in all of our interactions. We are dedicated to a true partnership with the teams who run the businesses in which we invest. Our focus at American Securities has always been and is on the long-term interest of the companies, management teams and investors we serve. The employees of American Securities seek personal fulfillment in doing what we do and ultimately we all hope to make the world a better place through giving back to the communities in which we live and work.

American Securities is somewhat unique in the private equity industry primarily due to the fact that the firm began as a family office and still to this day is invested in heavily by private wealthy families. Our fund actually has a 25 year life, which is far longer than most within the industry and a lot of that is due to our investor makeup. This is important because it influences our investment strategy significantly and affords us certain advantages that our competitors do not have. We are able to execute long term strategies within our portfolio. We can invest in and build new infrastructure if need be and we can ride out negative business cycles and not be pushed to sell prematurely because of a restrictive fund dynamic.

We look to invest in companies with leading market shares in their respective industries. We also prefer to invest in companies which have some differentiating factor that we can point to that we think will allow them to continue to be market share leaders. We favor companies that operate in an industry which we feel is and will be stable over the long term. Instead of attempting to build or buy a top management team, we actually seek to find targets which have a very competent management team in place. An additional item which makes American Securities unique in the private equity space and allows us to really work with our portfolio companies to improve the business and create additional value for our investors is our resources group. The resources group at American securities is made up of ex-consulting professionals who are in place to assist our portfolio companies with designing and implementing strategies across the globe.

American Securities has been active in the chemical industry M&A market and has developed extensive knowledge in the space. Some of the transactions we have executed in the space include Arizona Chemical, General Chemical, and Fairmount Minerals. We are and will continue to be excited about this industry for a variety of reasons. The chemicals industry is a diversified industry with a meaningful amount of small to medium size players with strong niche market positions. The companies within this industry are often global and thus provide numerous growth opportunities. Some of the specific investment themes or theses we are focused on now include companies benefitting from penetration trends displacing traditional materials such as those utilizing "green" or environmentally friendly chemicals, and companies with "newer" products with better performance characteristics such as those creating adhesive fasteners to replace mechanical fasteners.

### **Speaker Roundtable – Selected Questions and Answers**

Moderator: Peter Young, President and Managing Director, Young & Partners

Participants: Conference Speakers and Guests

<u>Peter Young (Young & Partners)</u>: A number of our speakers expressed their opinions about the future of the economy and what they feel is coming in the near and not so near future. I would like to ask those who did not get a chance to express their opinion on the economy, and more importantly the effect you think the broader economic shifts and movements will have on the chemical industry, to express their opinion.

Scott Wolff (American Securities): We at American Securities do not have a firm-wide prediction or view on the economy. However, we are obviously always very concerned about and interested in what is happening in the broader economy. I think today if we look at our chemicals companies, we see things in North America as generally OK. We are not seeing overly robust growth, but we are seeing stability and some pockets of small growth. We are still concerned about Europe and are seeing slowness in demand there. We have the view that in the medium term things will start to stabilize and we will see some growth. However, within our companies we have not seen that yet. We continue to believe Asia will be robust in terms of growth. Whether that growth will be 8%, 10%, or 6% we do not know exactly.

<u>Craig Rogerson (Chemtura)</u>: I would agree with the comments that others have made about the broader economy. With regard to Chemtura specifically, because of market specificity we are even a bit more optimistic about China than some of the other speakers and we expect to see a really strong improvement in 2014. Europe is quite flat in terms of growth. However, in specific markets such as petroleum additives and lubricants we are doing quite well there and so our view at Chemtura is surely market specific. North America feels very stable in terms of growth and Brazil has been a bit disappointing in terms of growth with the exception of the agriculture market, which has been doing quite well.

<u>Dewey Johnson (IHS Consulting)</u>: At IHS we do not have just one opinion, but about 250 different opinions coming from the close to 250 economists who work at the firm. However, in general what we see is the U.S. recovering (albeit slowly), Chinese growth decreasing slightly from about 8% to about 7% growth and flattening over the next decade, Latin America and Brazil at about 4% to 5% GDP growth, and Europe at zero to maybe 0.2% to 0.3% growth next year.

<u>Marc Chollet (Solvay)</u>: We have a similar view to Dewey on Brazil and we at Solvay are bullish on Brazil. We believe Brazil will experience 4% to 5% growth and we are happy with that. We have a strong position in Brazil and we think there is a lot of opportunity there. However, the Brazilian economy is certainly volatile and so it is not the easiest place to invest. We do see and expect growth in the U.S. and we expect Europe to maintain a smaller chemical industry market share going forward.

<u>Bill Avrin (Cytec)</u>: I would support almost all of the views on the global economy that have been presented thus far. We at Cytec are currently fortunate to be in some good secular growth markets. We do agree that Europe remains weak and that the U.S. is quite stable. We believe that Asia will experience solid growth going forward.

<u>Peter Young (Young & Partners):</u> My next question is directed at those of you who are officers of public companies. You all talk to analysts and shareholders on a constant basis. What are their concerns and expectations and what are they trying to push companies to do?

<u>Craig Rogerson (Chemtura)</u>: For Chemtura, investors are very interested in portfolio management including what we're going to do next. Some investors are geared to short term results while others take a longer term view. Analysts and investors are interested in the investments we have made and the returns projected; some within a very short timeframe. This is a significant shift in the way some analysts and investors rate company performance and their strategies to deliver such. There is a greater emphasis on quarter-to-quarter results, making it more difficult to justify long term investments.

<u>Peter Young (Young & Partners):</u> How do you deal with that as a CEO of a public company listening to analysts focus on such short-term results?

<u>Craig Rogerson (Chemtura)</u>: You can't react to those things. Your duty is to drive value creation over time. However, the fact of the matter is that when you are considering making capital investments or acquisitions you may be more risk averse than you would be if not specifically focused on short term financial results.

Bill Avrin (Cytec): I will add to what Craig said. There was a reference to the lack of basic research going on within chemical companies today and I believe it is a direct product of the impatient shareholder and the shorter-term focus on near term financial results. There is certainly a tradeoff between delivering short-term results and investing for the long term. If you are able to deliver short term on the promises you have made, you are allowed to make the longer-term basic research investments. However, once you lose that or miss some sort of short-term expectation, you lose that ability. At Cytec, we shed multiple businesses recently in order to increase shareholder value in the short term, not to grow. The company is half the size it was just a few years ago. It is difficult these days, but at some point you have to be able to balance the short-term shareholder value creation with your other obligation as the leader of a company, which is to grow the firm.