

"Getting Married to Get Divorced" Introducing the Dow-DuPont Merger (and Separation)

Group 1: Tang En Ci Nathan, Olivia Tang Shu Hui, V Divya, Nakorn Arunsopha, Samuel Wong Shi Kang, Chow Wei Li

An Overview

In this presentation, we cover the merger and separation of Dow and DuPont

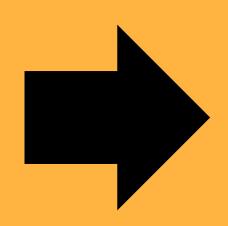
From this...



Company

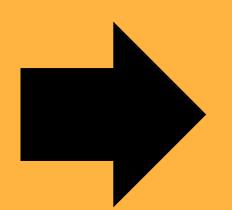


Company



To this...





And then to this...



Dow Inc.



DuPont de Nemours, Inc.



Corteva, Inc

This happened over four years from 2015 to 2019

Jul 2016

 Dow and DuPont shareholders approved the merger between Dow and DuPont

2018

 DowDuPont was restructured to prepare for the spin off into three separate companies

Dec 2015

- Dow Chemical and DuPont announced a \$130 billion "merger of equals"
- Management revealed plan to merge, then split into three independent companies, focusing on materials science, specialty products and agriculture

<u>Aug 2017</u>

- Dow and DuPont merger was successfully completed
- Combined entity operated as a holding company under the name "DowDuPont" with three divisions – materials science, specialty products and agriculture

2019

- DowDuPont was successfully split into three different companies
- Dow Inc. for materials science
- DuPont for specialty products
- Corteva for agriculture

We will cover this in six parts

Part 1:
The Companies

Part 4:
The Reaction

Part 2:
The History

Part 5:
The Process

Part 3:
The Catalyst

Part 6:
The Outcome

Part 1: The Companies

Dow and DuPont had similar histories and backgrounds

Century-long legacies in Chemistry with comparable scale and maturity, long R&D driven histories and shared roots in materials science.



OUPONT, M

Name

Founded

Headquarters

Market Cap (2015)

Listed

Core Identity

The Dow Chemical Company

1897

Midland, Michigan, USA

~US\$65B

1937, NYSE

Specialty Chemicals

E. I. du Pont de Nemours and Company

1802

Wilmington, Delaware, USA

~US\$65B

1902, NYSE

Fertilizers and Agricultural Chemicals

Both firms also had similar and overlapping business portfolios

Both firms participated across the chemicals, materials and agriscience industries, creating adjacencies



Plastics

Such as thermoplastics, polymers and resins



Agricultural Products

Crop protection chemicals and genetically modified seeds



Industrial Chemicals

Such as solvents, sealants, coatings and lubes



Consumer Products

Packaging materials, home care products and specialty materials



Performance Materials

Materials for automotive, aerospace and defense industries



Electronic Materials

Electronic materials and signal management

However, both had slightly different focus areas:, which created scope for synergies



FOCUSED ON SCALE

- Commodity Chemicals
- Product Optimisation
- Cost Efficiency, Global Manufacturing Scale
- High-Volume Performance Materials & Coatings
- Revenue Nature: Cyclical, Volume Play



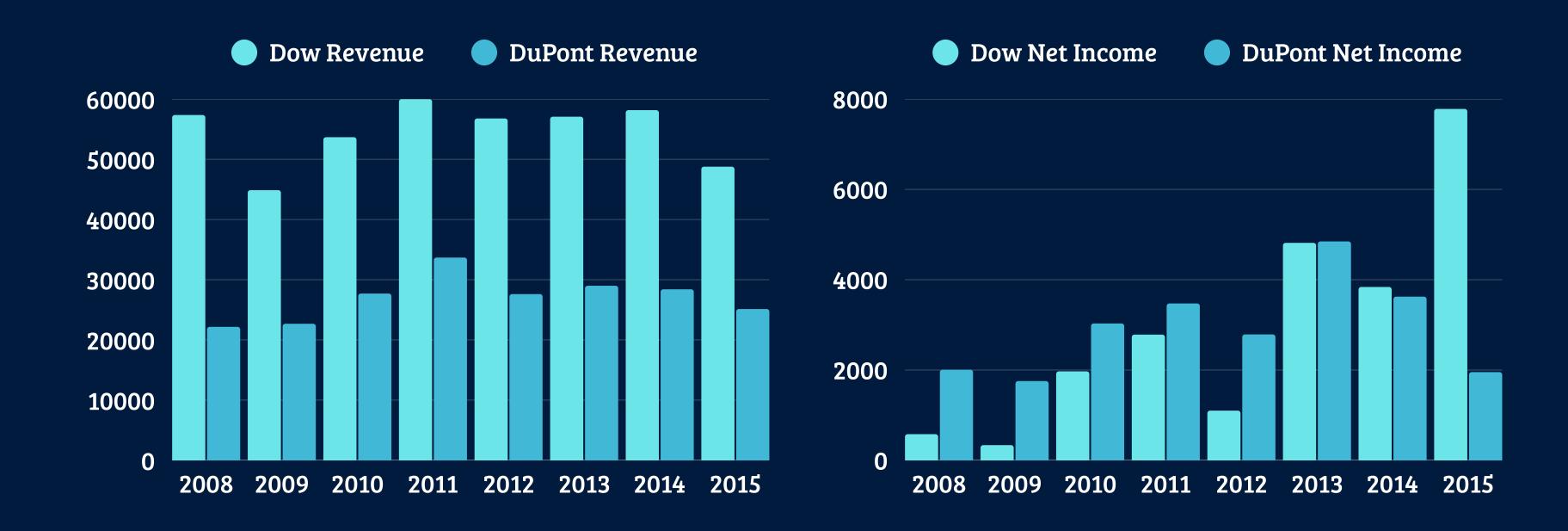
FOCUSED ON VALUE

- Specialty Chemicals
- Product Differentiation
- Innovation Driven, IP-led growth
- High-Value Safety Materials: Kevlar, Tyvek
- Revenue Nature: Premium Margin Play

Potential to leverage on different strengths:

Scale (Dow) × Specialization (DuPont) = Full Value-Chain Integration + High Synergy Potential

Prior to the merger, Dow was performing slightly better in revenue and net income



However, DuPont was out-performing in terms of margin, credit and debt

OW



Revenue	US\$54B	US\$28B

Operating EBITDA	US\$9B	US\$6B
		00402

Operating Margin	17%	21%
------------------	-----	-----

Dividend Policy	45% of Net Income	25-45% of Operating Cash Flow
-----------------	-------------------	-------------------------------

Credit Rating	BBB/Baa2/BBB	A-/A3/A
		/

Net Debt	US\$12.1B	US\$6.2B

From a market perspective, both companies had a similar valuation ratios and market cap

	DOW	
Share Price	US\$49.71	US\$171.66
Earnings Per Share	US\$2.94	US\$10.71
Price to Earnings Ratio	16.9	16.0
Price to Sales Ratio	1.0	1.5
Price to Book Ratio	1.4	1.5
Market Capitalisation	US\$65 Billion	US\$65 Billion

On control, both companies were mostly owned by institutional investors

Type	Dow	OUPONT TM
Institutional	~67%	~88%
Public	~33%	~12%
Insider	<1%	<1%

Part 2: The History

The Dow-DuPont merger had been considered since the early 2000s

"The idea (of a merger) dates to the early 2000s, before I joined as CFO in 2014. Successive DuPont and Dow CEOs met over the years, but they could never reach a meeting of the minds."

Howard Ungerleider CFO, Dow Chemical

In the early 2010s, the participation of activists further fueled the flames



Dan Loeb
Founder and CEO
Third Point



Nelson Peltz Co-Founder Trian Partners

Dan Loeb publicly criticised Dow in 2014 and called for its restructuring



Dan Loeb
Founder and CEO
Third Point



Bought a 2% Stake in Dow in 2014

Equivalent to 23.5 million shares worth more than \$1 billion



Publicly Criticised Dow's Performance

Called for Dow's breakup and restructuring to unlock shareholder value



Gained 4 Board Seats in End 2014

Made initial losses on Dow's stock in end 2014 but had recovered by end-2015

Nelson Peltz took a similar approach with DuPont



Bought a 3% Stake in DuPont in 2013

Equivalent to 25.8 million shares worth more than \$1.2 billion



Pushed for DuPont to Break Up

Proposed splitting DuPont into focused segments to unlock shareholder value



But Lost the Battle in end 2014

Peltz's request for four seats on the board was rejected, and company retained its full board



Nelson Peltz Co-Founder Trian Partners

Dan Loeb's argument was that Dow was clunky, chunky and bulky

Dow was "hanging on to clunky, low-margin bulk chemicals businesses" which weighed down overall performance and shareholder returns

Keeping all Dow's operations under one umbrella "hampered the company's performance and share price" which had "trailed industry peers"

While Nelson Peltz's argument was that DuPont was too big

"The reason for DuPont's persistent underperformance is very simple: DuPont's conglomerate structure is destroying value"

"DuPont board has not held management accountable for repeatedly missing promised revenue and earnings targets"

Both activist investors paved the way for the merger, but not directly credited



Dan Loeb
Founder and CEO
Third Point



Nelson Peltz Co-Founder Trian Partners

Part 3: The Catalyst

The tipping point came in Oct 2015, with the change of DuPont's CEO









Edward Breen
Appointed as CEO in
Oct 2015

Edward Breen's Background

- CEO of Tyco (2002-2012)
- President and COO of Motorola (2000-2002)
- Chairman, President and CEO of General Instrument Corporation (1978-2000)

"Oversaw the sale of General Instrument Corporation to Motorola"

On 11 Dec 2015, the merger deal was announced; touted as a "merger of equals"

Deal Value	• Approximately \$61.8B
Transaction Type	 All-Stock Transaction Acquisition of whole company including majority stakes
Exchange Ratio	 Dow and Dupont Shareholders will each own 50% of the HoldCo Dow shareholders to receive 1 share of DowDuPont (HoldCo) for each Dow share; DuPont shareholders will receive 1.282 shares in DowDuPont for each DuPont share
Combined Market Capitalisation	• \$130B at announcement (Dow Market Cap: ~\$65B + DuPont Market Cap: ~\$65B)
Post Merger Ownership & Corporate Governance	 Andrew Liveris (CEO of Dow) → Executive Chairman of DowDuPont Edward Breen (CEO of DuPont) → CEO of DowDuPont Board: 16 directors (8 from Dow, 8 from DuPont)

The promise: to unlock \$30 Billion of market value



\$3 Billion in Cost Synergies



\$1 Billion in Growth Synergies



Projected to Create \$30 Billion in Market Value

The arguments: reducing procurement and ops costs, expanding offerings



\$3 Billion in Cost Synergies

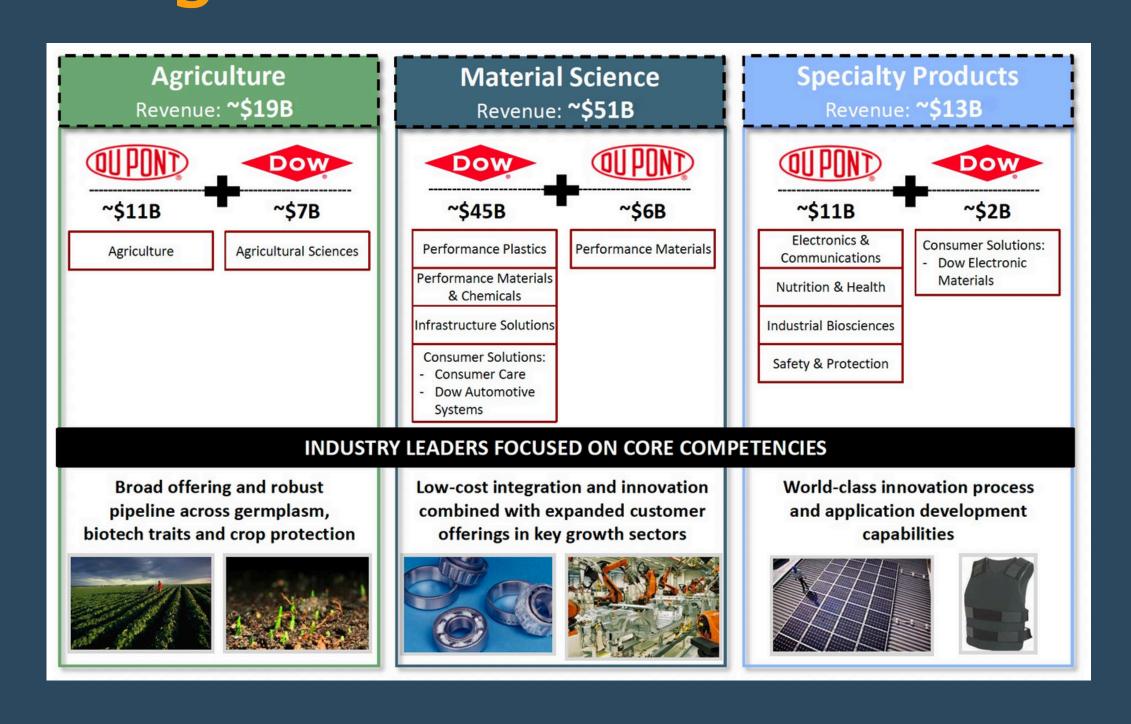
- Mostly from procurement synergies, global workforce reductions, buildings and facilities consolidation, and select asset shutdowns
- Expected savings by Division:
 - o Agriculture (\$1.3 billion)
 - Materials Science (\$1.5 billion)
 - Specialty Products (\$300 million)



\$1 Billion in Growth Synergies

- Materials Science: integration of resins and copolymers portfolio
- Specialty Products: enhanced channel access and broadened suite of materials for electronics and communications
- Agriculture: multi-brand, multi-channel approach and whole-farm solutions

As well as potential for global leadership in each industry



Part 4: The Reaction

Upon the announcement, both stocks rallied, but less than expected

Expected Increase

Initial Market
Cap:
\$130 Billion



Announced Market
Value Creation:
\$30 Billion



Supposed New Market Cap: \$160 Billion



Expected Price Increase: 23%



Actual Increase



10.3%

Surge in Stock Price





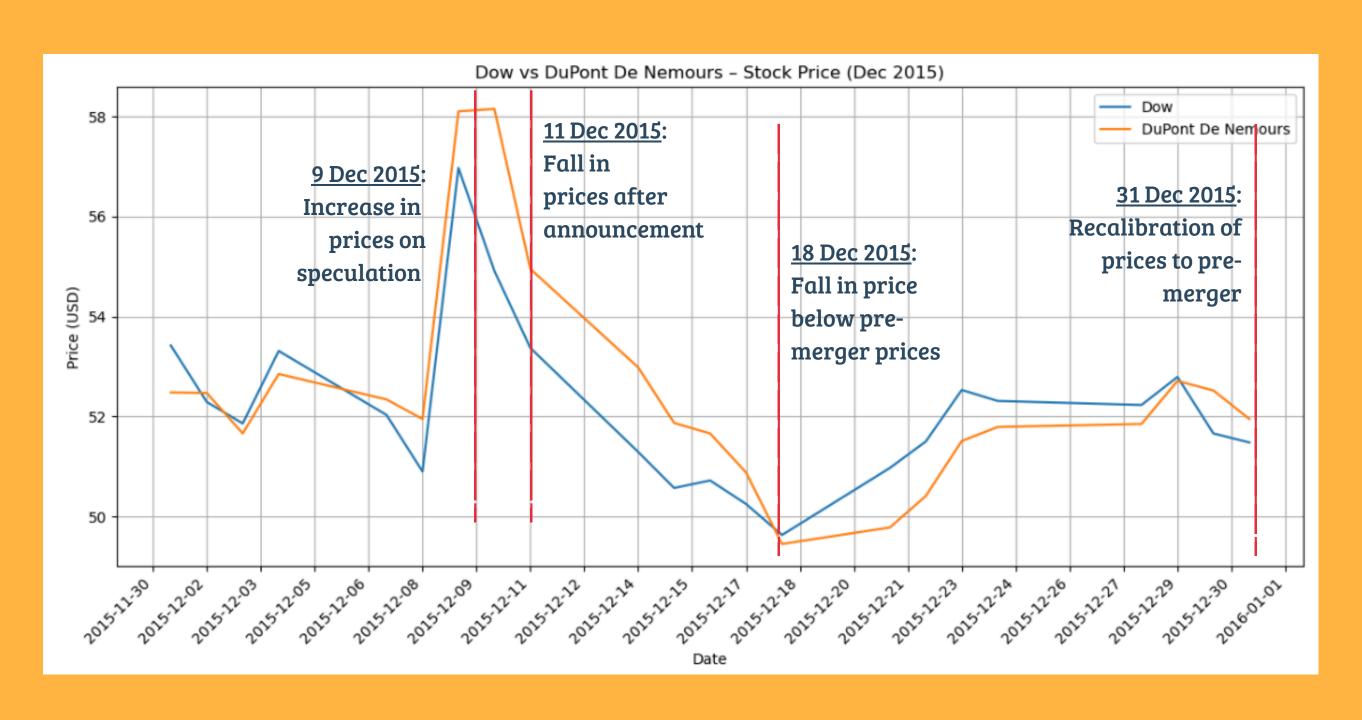
Surge in Stock Price



Either:

- Only ascribed 50% chance of merger being a success, OR
- Only saw \$15 billion market value creation potential

Much of the surge was also on speculation before the announcement, and fell after that



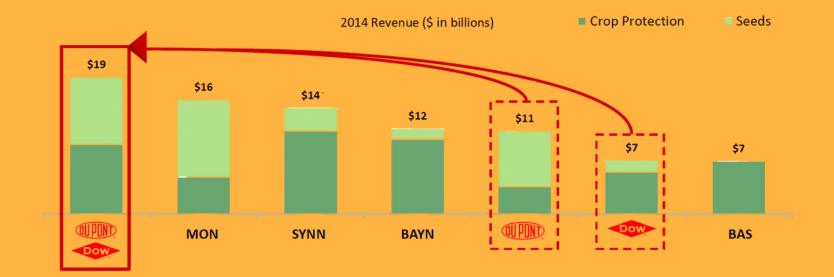
Majority of commentators saw the deal as positive, but with some concerns



Analysts pointed out the improvement of its global competitive position vs. competitors



Analysts were concerned about the job cuts as DuPont announced plans to cut 10% of its 63,000 workforce worldwide in preparation of the merger.





Analysts were also concerned about the decrease in investment in R&D, as Dow DuPont announced cuts in R&D by \$300 million



Analysts also believed shareholder value would be unlocked as each spin-off would likely trade at higher multiples

Many commentators also commented on potential integration challenges



Challenge of Equal Leadership?

Equal board membership could result in slow-moving or indecisive governance



Challenge of Cultural Clashes?

Dow focused on cost leadership, DuPont focused on differentiation



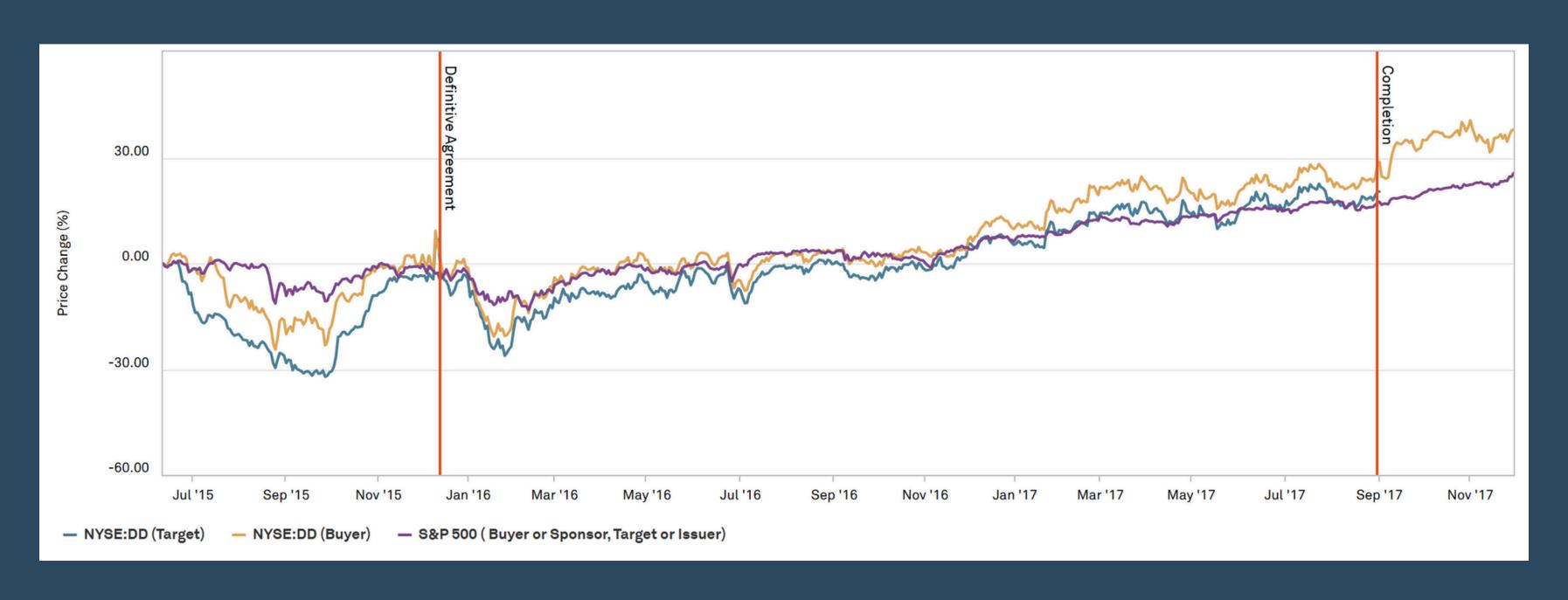
Challenges of Complexity?

Both companies were massive, and difficult to decide which assets went to which firms

Part 5: The

Process

In reality however, the process was smoother than expected (also reflected in stock price)



Based on the share exchange ratio, the merged company's share price should have been \$80.24

Expected Market Value		Expected Number of Shares and Share Price	
Dow Market Value Prior to Merger	\$65B	DuPont Number of Shares Prior to Merger	873.9M
DuPont Market Value Prior to Merger	\$65B	New DuPont Shares Created (Share Exchange Ratio of 1:1.282)	1,120M
Additional Market Value From Merger	\$30B	Total Number of DuPont Shares After Merger	1,994M
Expected Market Capitalisation After Merger	\$160B	Expected Share Price After Merger (Expected Market Cap/ Number of Shares)	<u>\$80.24</u>

But it eventually went as high as \$100 after the merged ticker (DDWP) was listed



However, there were some antitrust issues



Forced Divestures

EU regulators forced DuPont to divest its global crop protection business to FMC



Delay in Spin-Offs

Spin-off companies were not approved until regulators were satisfied



Restrictions on R&D

DowDuPont forced to divest R&D capabilities to competitor to increase competition

There were also some reports of leadership instability

Dow and DuPont faced... "doubled executive turnover rates for nearly a decade, signaling broader retention challenges from cultural clashes - Dow's cost-focus versus DuPont's innovation ethos"

......

The Wall Street Journal

Part 6: The Outcome

From an execution perspective, the deal was a resounding success



Successful Merger of Dow and DuPont

- Dow and DuPont were officially merged on 31 Aug 2017
- DowDuPont shares began regular trading on 1 Sep 2017



Successful Execution of the Three-Way Split

- Dow Inc. spun off on 1 April 2019
- Corteva spun off on 1 June 2019
- DuPont renamed as DuPont de Nemours on 1 Jun 2019

With no major crisis or impediments

The Dow CFO credited the "success" to good communication and governance

"The length of time it took made it essential to communicate—even overcommunicate. You <u>have to set out milestones and keep everybody</u> informed along the way about what will happen when."

"The DowDuPont steering team handled that (the tactical steps). ...

Leading up to the merged state, we met monthly. Afterward, we met weekly and would rotate topics every week."

Howard Ungerleider CFO, Dow Chemical

Our Analysis

The merger sounds great in theory from a strategic perspective

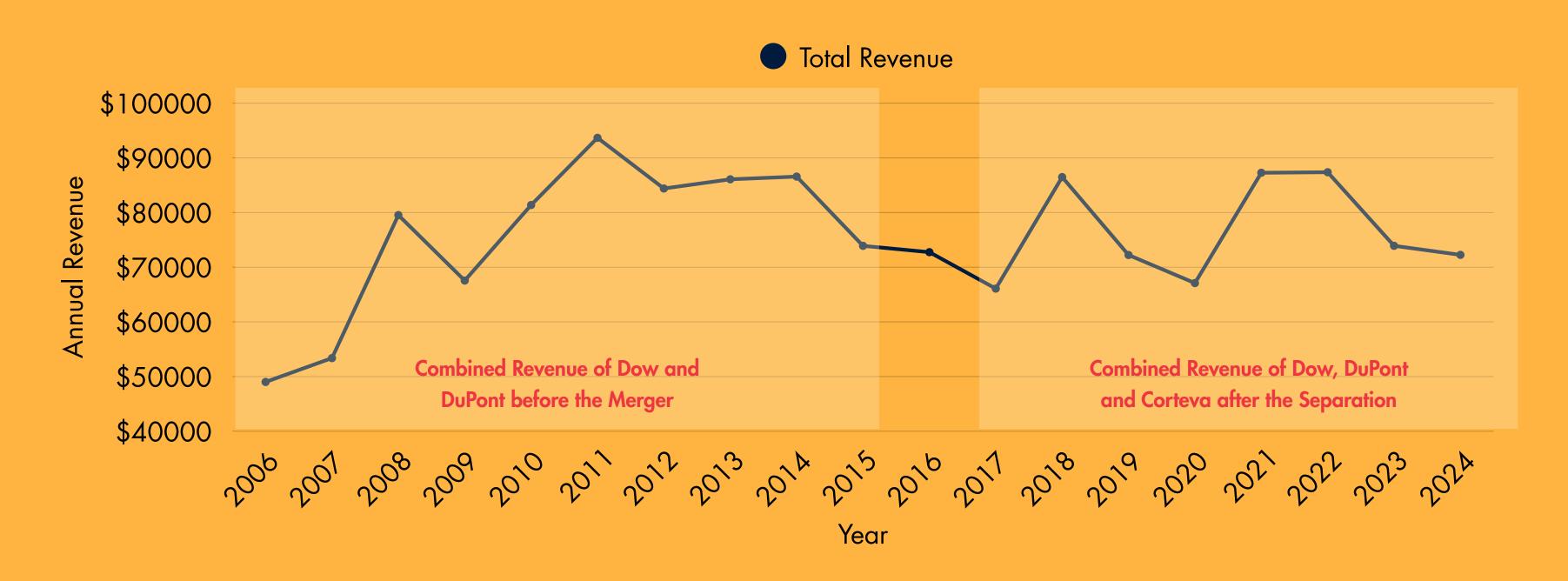
Strategically Sound Given Companies' Context

- Merger promised scale, synergy opportunities, and portfolio rationalisation
- Merger promised to bring companies out of weak performance baselines
- Brilliance was in allowing each new company to remain market leaders while focused on a niche

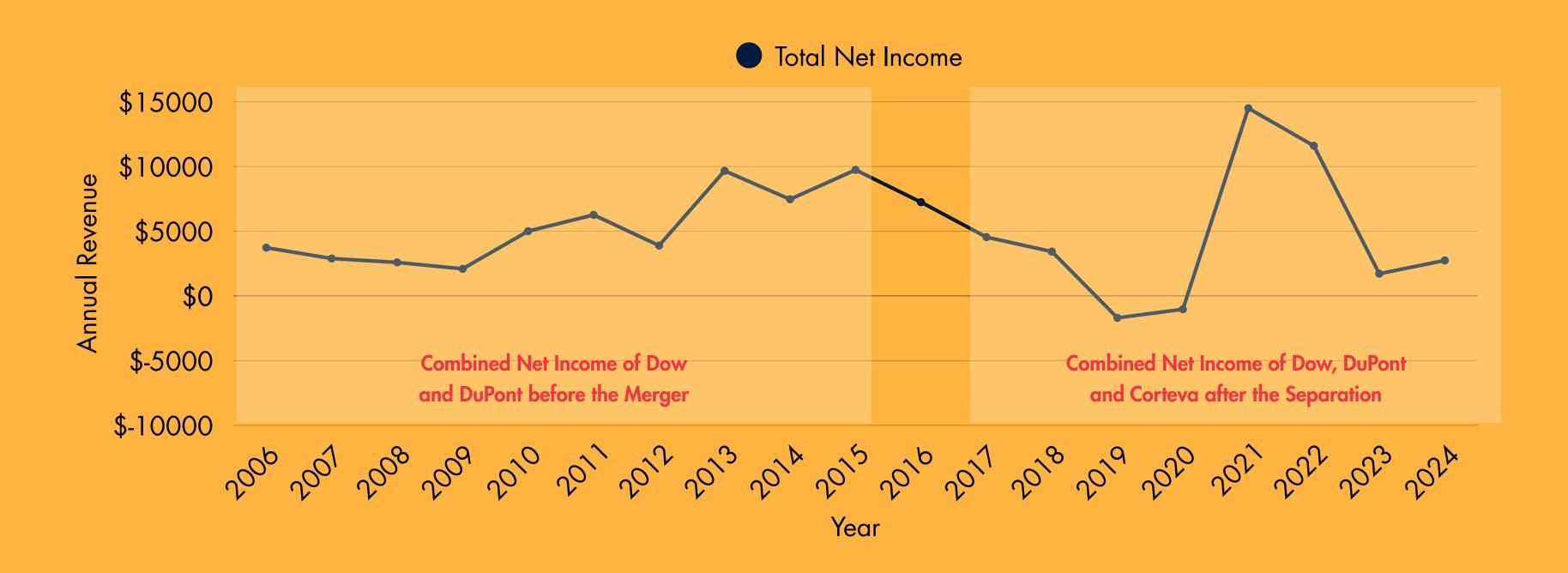
Rationally Sound to Listen to Investors

- Activists pushed for simplification for years
- A temporary "mega-holdco" allowed clean separation into 3 coherent pure-plays
- This structure was not achievable independently

While well-executed, the deal had little overall impact on the firms' revenues



Similarly, there was minimal impact on the net income

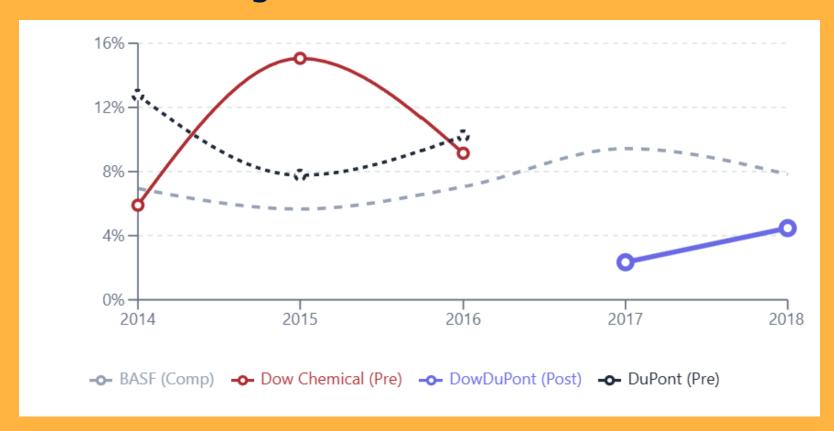


As well as on the market capitalisation, despite an initial spike

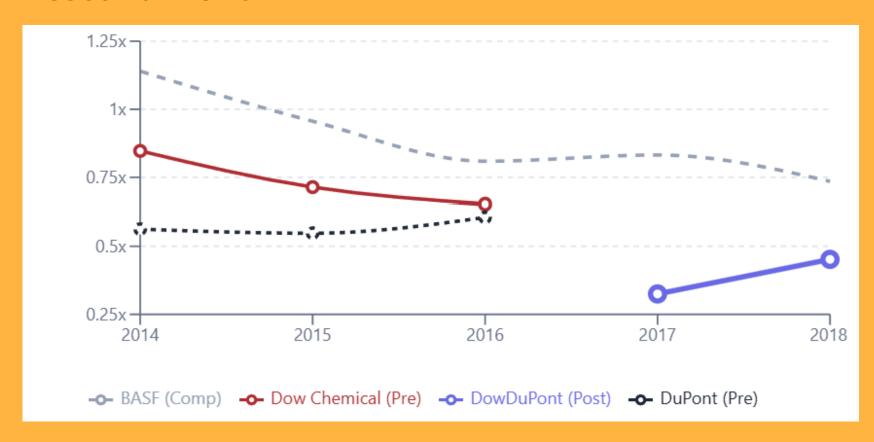


Net profit margin and asset turnover also seem to have fallen

Net Profit Margin

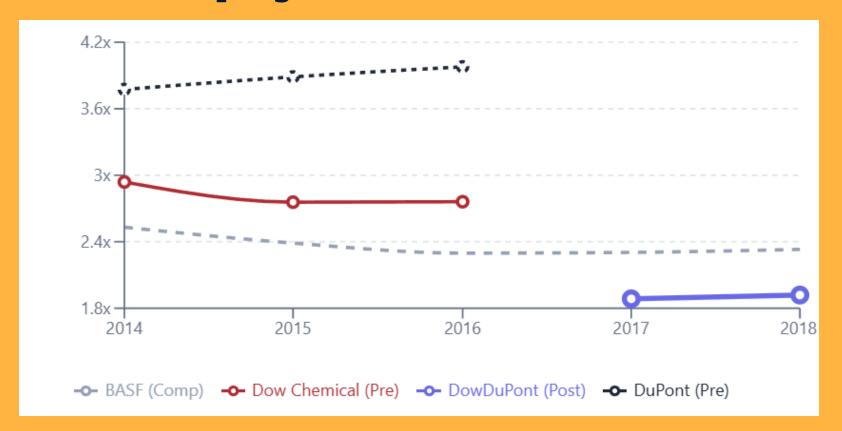


Asset Turnover

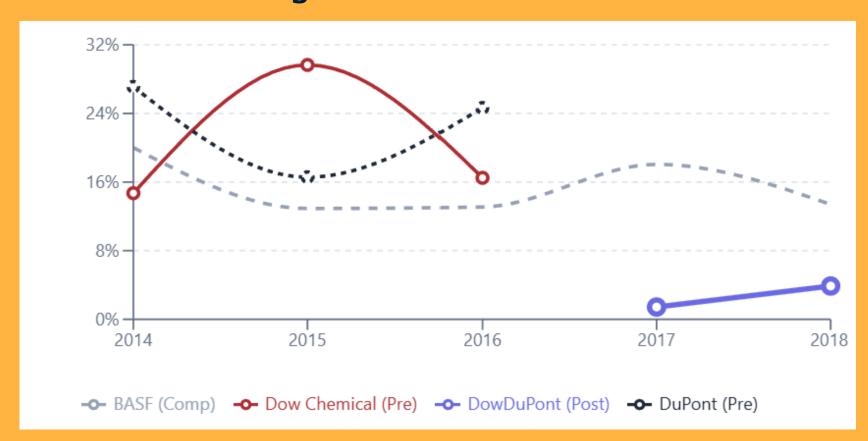


Return on equity also seems to have fallen although this could be due to lower leverage

Return on Equity



Financial Leverage



Our conclusion: a strategic win in theory with good execution, but disappointing financial outcome

Strategic

The Strategy Made Sense from a Theoretical Perspective

- Combining and splitting
 Dow and DuPont promised
 to allow the companies to
 remain market leaders
 while having greater
 clarity on their mission
- It also gave them a better investor base

Operational

Execution Was Delivered Well
Albeit With Setbacks

- Synergies in lowering costs and being established as market leaders broadly realised
- Some setbacks from antitrust laws in forced divestures reduced potential benefits

Financial

No Obvious Improvement in Revenues and Net Income

- Revenue, net income, returns and market capitalisation remain stagnated
- Could partially be due to market cycles or macro compression

Still, if we think about some possible underlying motives by the management, this could be regarded as a bigger success



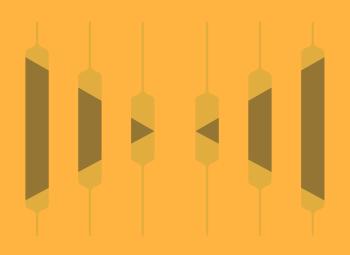
Satisfying activist investors to prevent hostile takeovers?

Where are Dow, DuPont and Corteva today?



Corteva

Strong growth and shareholder return, well positioned portfolio



DuPont

Stable but in continuous restructuring



Dow

Major value destruction from cyclicality and margin compression

Still around, but not doing exceptionally well

Our Key Learning Reflections



M&A can be a transitional mechanism

M&A is ultimately a tool for strategy, it can be used to achieve the outcomes that management or the board wants



M&A success depends on personality

Dow DuPont merger only possible when change of DuPont CEO, and DuPont played second fiddle throughout the process; possible that previous CEO did not want to do so



M&A can sound good in theory, but may not deliver

Highly important to not just drum up potential synergies, but ensure that the business focuses on its desired outcomes and its strategy to get there





Reported opportunities for cost synergies

	Agriculture	Material Science	Specialty Products
Business Synergies	 Drive seed production and go-to-market cost efficiencies Eliminate duplicative R&D programs including breeding, traits and chemical discovery Enhance supply chain and global site optimization 	 Optimize global footprint across manufacturing, sales and R&D facilities Capture feedstock / hydrocarbons synergies Enhance operational excellence in production cost efficiencies 	 Leverage R&D spend (programs, resources, sites) in the electronics space Optimize manufacturing in the electronics space Leverage raw materials buy in key market segments
Corporate Synergies	Reduce corporate and leveraged services costs Realization of significant procurement synergies		
Total Cost Synergies	~\$1.3B	~\$1.5B	~\$0.3B
Transaction Synergies are Above and Beyond <u>Dow</u> and <u>DuPont</u> Standalone Cost Reduction Programs			
QUPONT	\$700 million in cost reductions to be realized in 2016 Business and corporate costs		
3-year, \$1 billion productivity plan (2015-2017) • \$300 million to be realized in 2016 (prior to expected transaction close)			

Reported cost synergies by function

