

# CORPORATE FINANCE FOR LONG-TERM VALUE

Chapter 11: Case Study Integrated Valuation: Inditex

## Chapter 11: Case Study Integrated Valuation: Inditex

# The BIG Picture

3

- A case study of Inditex to show how integrated valuation can be done

## Findings

- Strategy and business model of fast fashion is built on high sales with new collections based on strong consumer brand (FV, SV<sup>+</sup>)
- At the cost of workers in supply chain (SV<sup>-</sup>) and environment (cotton, pollution, burning) (EV<sup>-</sup>)
- Integrated valuation reflect these facts: SV<sup>+</sup>, SV<sup>-</sup> and EV<sup>-</sup> components larger than FV
- Many assumptions needed in analysis as company information on sustainability is very limited

# Inditex case study

ZARA

ZARA  
HOME

*stradivarius*

UTERQÜE

**INDITEX**

OYSHO

*Massimo Dutti*

**PULL&BEAR**

Bershka

Overview: Fully integrated Store&Online

Multi-concept approach

Global presence

Stores/Online

Market cap. €86 bn



# The company

5

- Industria de Diseño Textil (translated: 'Textile Design Industry') is a Spanish clothing company
- Biggest fashion group in the world with 7,200 stores in 93 countries
- IPO in 2001 with a €9 billion valuation
- Most sales (60%) in Europe, specifically Spain (25%), with presence in APAC (25%) and the Americas (14%)

# Company value drivers: sales

6

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Sales (€ billions)</b>	13.8	15.9	16.7	18.1	20.9	23.3	25.3	26.1	28.2	20.4
<b>Sales growth</b>	10.4%	15.2%	5.0%	8.4%	15.5%	11.5%	8.6%	3.2%	8.0%	-27.7%

- Inditex has produced consistent growth numbers during the 2010s
- The lower growth towards the end of the decade could indicate a fading growth profile
- Due to the Covid-19 pandemic, Inditex saw a staggering drop in sales globally in 2020

# Company value drivers: profitability

7

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>EBIT (€ millions)</b>	2,522	3,117	3,070	3,198	3,677	4,021	4,314	4,357	4,772	1,507
<b>EBIT margin</b>	18.3%	19.6%	18.4%	17.7%	17.6%	17.3%	17.1%	16.7%	16.9%	7.4%
<b>EBITDA (€ millions)</b>	3,258	3,913	3,926	4,103	4,699	5,083	5,277	5,457	7,598	4,552
<b>EBITDA margin</b>	23.6%	24.6%	23.5%	22.7%	22.5%	21.8%	20.9%	20.9%	26.9%	22.3%

- Inditex's profitability has been remarkably consistent throughout the last decade
- The company's EBITDA has also performed well, although decreasing slightly over time
- The growth in EBITDA compared to EBIT in 2019 indicates an increase in depreciation due to a sizeable growth in assets

# Company value drivers: capital

8

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Total Assets</b>	10,959	12,890	13,756	15,377	17,357	19,621	20,231	21,684	28,391	26,418
<b>Sales / Assets</b>	1.26	1.23	1.21	1.18	1.20	1.19	1.25	1.20	0.99	0.77
<b>Capex</b>	-1,349	-1,599	-1,351	-1,847	-2,416	-2,396	-833	-1,875	-2,377	2,514
<b>Capex / Sales</b>	9.8%	10.1%	8.1%	10.2%	11.6%	10.3%	3.3%	7.2%	8.4%	-12.3%

- Except for 2020, Inditex showed a strong financial performance over the past decade
- Assets grew faster than sales as shown by the falling sales-to-assets ratio, potentially indicating reduced efficiency
- In 2020, capex was negative indicating divestment of assets



# Business model

9

## Customer value proposition

- Fashionable clothing at decent prices
- In their own words (AR, p44): “to offer our customers fashion items that meet the most demanding design, safety, sustainability and quality standards, at affordable prices.”

Driven by frequently issuing new collections, produced in an outsourced supply chain, to minimise costs and maintain high ROIC

## Profit formula

- Double digit EBIT margin driven by scale & efficiency
- Sales/IC > 1
- Hence high ROIC

## Key resources and processes

- 8 brands
- Integrated but outsourced supply chain
- Frequent new collections
- “Over time, we have developed a unique business model characterised by flexibility, integration, sustainability, creativity and innovation. Key to our management is the ongoing, centralised analysis of information on business development.” (AR p44)

# Purpose

10

- A company's purpose is the reason for its existence, grounded in the way it creates value for its clients and other stakeholders
- Inditex does not explicitly state their purpose in their reporting, although implicitly mention it on their website:

*“Our workforce never loses sight of the customer. We work to create value beyond profit, putting people and the environment at the centre of our decision-making, and always striving to do and be better. It is fundamental to how we do business that our fashion is Right to Wear.”*

- Conclusion: Inditex' purpose is a question mark, and so is the fit of the purpose with what stakeholder want and what is needed for navigating transitions

# Stakeholders & Stakeholder Impact Map

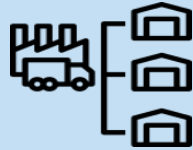
## The stakeholders of Inditex (as identified by the company)



Customers



Employees



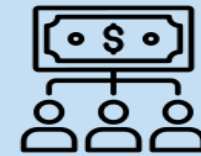
Suppliers



Community



Environment



Shareholders

Source: Adapted from Inditex Annual Report 2020, page 42

Stakeholders	Goals	Helped or hurt?
Customers	Fast fashion at low prices	They get it – they are the company’s focus of attention
Own employees	Decent pay & working conditions	Reasonably, they meet the official standards
Employees elsewhere in the chain	Decent pay & working conditions	Poor wages & working conditions, left to local suppliers
Suppliers	Profitability, growth and stability	Profitability and growth probably better than alternatives, but not stability: unreliable as orders are easily cancelled
Nature (Inditex: environment)	Operate within planetary boundaries	Hurt by high GHG emissions and waste
Investors (Inditex: shareholders)	High financial returns	So far, yes
Governments (Inditex: community)	Economic activity & taxes	Yes

Main frictions as a result of business model

Note: Authors’ assessments. We identify roughly the same stakeholders as Inditex does, but some with different labels as the scope is slightly different

# Financially material sustainability issues

12

## □ Overview of the issues that Inditex deems material:

- Ethical behaviour and governance
- Risk management and control systems
- Stakeholder engagement
- Responsible communication
- Value chain transparency and traceability
- Responsible purchasing practices
- Value creation
- Innovation
- Customer orientation
- Diversity, equality and inclusion
- Quality of employment
- Human rights
- Safe and healthy environments
- Talent management
- Socially sustainable production environments
- Climate change
- Environmental footprint minimisation
- Protection of natural resources
- Product sustainability
- Circularity

# External impacts

13

- External impacts are very important to society:
  - ▣ What kind of positive and/or negative external impacts does the company generate?
  - ▣ To what extent does the company report about these external impacts?
  - ▣ Can they be quantified, or even be priced?
- Companies can compile impact-weighted accounts:
  - ▣ Impact-weighted P&L
  - ▣ Impact-weighted balance sheet
- Impact Economy Foundation gives guidance in its Impact-Weight Accounts Framework (IWAF)

# External impacts

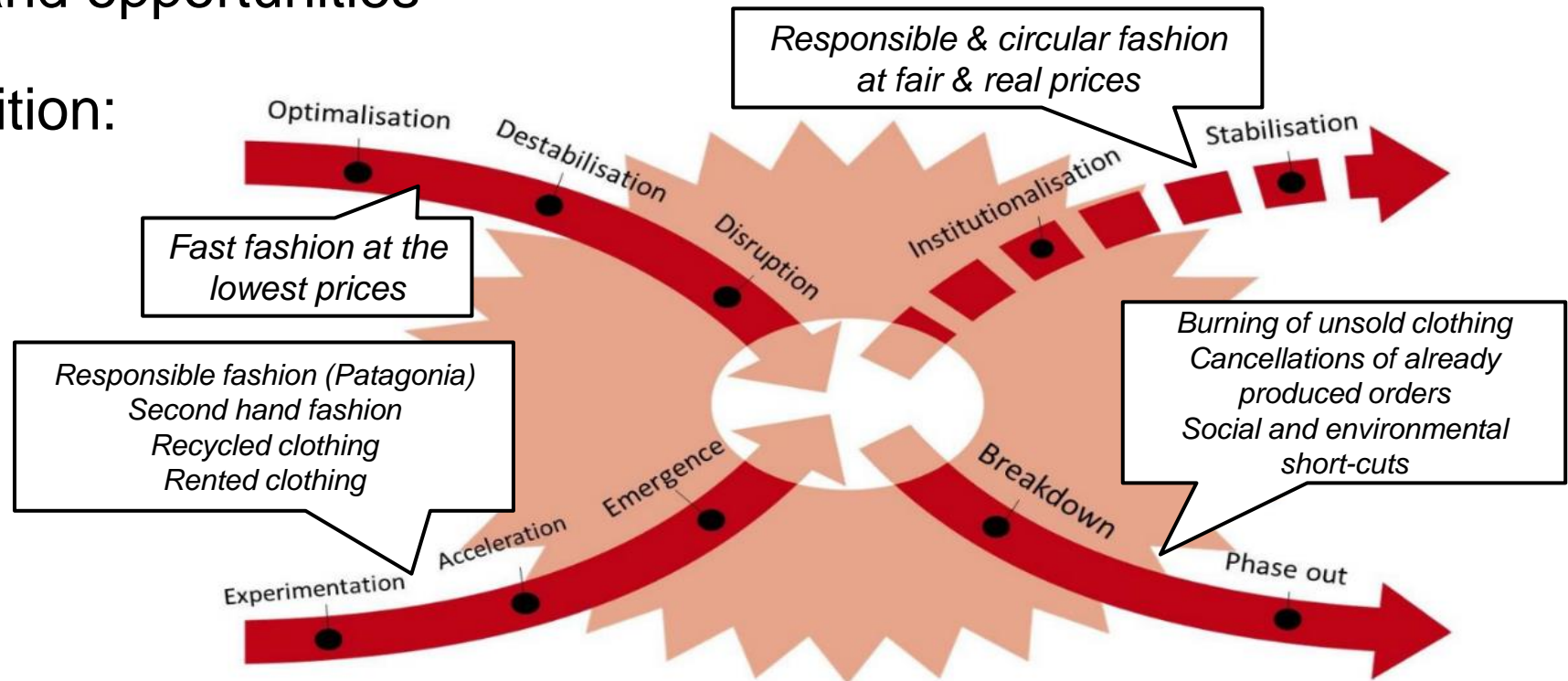
Key impact categories	Likely positive or negative	Problematic if substantially negative
Profit	P	
Salaries	P	
Interest payments	P	
Taxes	P	
Payments to suppliers	P	
Payments from clients	N	
Cost of capital	N	
Change in fixed assets	?	
Client value of products	P	
Client value of services	N/A	
Value of impact materials	N	potentially
Creation of intellectual capital	P	
Wellbeing of employment	?	potentially

Key impact categories	Likely positive or negative	Problematic if substantially negative
Value to employees due to training and experience	P	
Effects on human health	N	potentially
Occupational health & safety incidents	N	potentially
Time invested by employees	N	
Contribution to/limitation of climate change	N	potentially
Contribution to/limitation of pollution*	N	potentially
Contribution to/limitation of availability of scarce natural resources**	N	potentially
Contribution to/limitation of poverty	Both	potentially
Contribution to/limitation of human rights violations	N	potentially

# Transition

15

- Inditex' negative external impacts are the main sources of the company's transition risks and opportunities
- X-curve of transition:



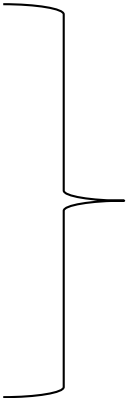
Source: Adapted from Loorbach, Frantzeskaki, and Avelino (2017)

# Transition preparedness

16

## □ How can Inditex navigate this transition?

- How quick and broad-based is the transition of the fast fashion sector?
- Can it significantly reduce its negative impacts without perishing in the process?
- How well prepared is Inditex compared to others?
- To what extent can Inditex adapt?



The answers to this question determine:  
The industry's transition exposure -  $b_j$   
The company's adaptability -  $a_i$

- Given the major negative impacts that the fast fashion industry generates for society on both S and E and the availability of substitutes, we rate the industry's transition exposure ( $b_j$ ) quite high at 0.8



# Management

17

- Management has been very successful in growing the company in a profitable way
- The key question is whether management can rethink and redesign the business model to suit the transition
- The company's reporting suggests that management is still partly in denial, but strategic thinking tends to be ahead of reporting
- Recently, there has been a change in management, with the founder's daughter becoming the new chairwoman

# Valuation of Inditex' financial value using DCF

Inditex	grey: historical				black: assumptions				white: calculated				WACC: 7.8%	TV growth: 2%		
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
<b>1-1-2021</b>																
<b>Value driver assumptions</b>																
Sales growth		3.2%	8.2%	-27.9	45.0%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	2.0%
EBIT margin	17.0%	16.7%	16.9%	7.4%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%	16.5%
Effective tax rate	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Depreciation/sales	3.8%	4.2%	10.0%	14.9%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
CAPEX/sales	7.0%	6.2%	4.1%	3.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
NWC/sales			-12.1%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%	-12.5%
<b>Value drivers (in euro millions)</b>																
Sales	25336	26145	28286	20402	29583	30914	32305	33759	35278	36866	38525	40258	42070	43963	45941	46860
EBIT	4314	4357	4772	1507	4881	5101	5330	5570	5821	6083	6357	6643	6942	7254	7580	7732
Taxes on EBIT	1,079	1,089	1,193	377	1,220	1,275	1,333	1,393	1,455	1,521	1,589	1,661	1,735	1,813	1,895	1,933
NOPLAT	3236	3268	3579	1130	3661	3826	3998	4178	4366	4562	4767	4982	5206	5440	5685	5799
Depreciation	963	1100	2826	3045	1183	1237	1292	1350	1411	1475	1541	1610	1683	1759	1838	1874
Gross cash flow	4199	4368	6405	4175	4844	5062	5290	5528	5777	6037	6308	6592	6889	7199	7523	7673
CAPEX	1772	1621	1152	708	1183	1237	1292	1350	1411	1475	1541	1610	1683	1759	1838	1874
increase in NWC		16	-3948	878	-1146	-166	-174	-181	-190	-198	-207	-216	-226	-236	-247	-115
Gross investment		1637	-2796	1586	37	1070	1119	1169	1221	1276	1334	1394	1457	1522	1591	1760
Free cash flow (FCF)		2731	9201	2589	4807	3992	4171	4359	4555	4760	4975	5198	5432	5677	5932	5914

Sum of PV: Enterprise value	79064
Other assets	0
Company value	79064
Net debt	-3089
Equity value	82153
Number of diluted shares outstanding	3110
Fair value stock price euro	26.4
Stock price, 4 January 2021	26.4

NPV calculation												
Period	1	2	3	4	5	6	7	8	9	10	11	
Terminal Value (TV)											101959	
Discount factor	0.928	0.861	0.798	0.704	0.687	0.637	0.591	0.548	0.509	0.472	0.438	
Present value (PV)	4460	3436	3331	3228	3129	3033	2940	2850	2763	2678	2596	
Sum of PV: Enterprise value	79064										TV	56%

Method: reverse-engineer the DCF to the current stock price (the market's opinion)





# Transition valuation scenarios

20

- Qualitative transition scenarios can be deep and multifaceted, allowing management to identify new pathways for navigating transition
- Valuation scenarios need to be simple for quantification that makes intuitive sense

	Effective global climate mitigation by 2030 (successful transition)	Mere climate adaptation, no serious mitigation by 2030 (unsuccessful transition)
Company is well prepared for climate mitigation	Scenario 1a: serious investment in recycling and in rental models; cutback on new collections; more ownership in the value chain	Scenario 2a: strategy as in 1a, but with less payoff
Company is ill prepared	Scenario 1b: continued to operate in business-as-usual mode, missed trends, and paid high price	Scenario 2b: strategy as in 1b, but at no penalty

# Transition valuation scenarios

21

- To get a scenario weighted valuation, probabilities must get assigned to each scenario
- Assumption: 40% probability of effective global climate mitigation and 60% probability that Inditex is prepared for the transition

Scenario	DCF fair value per share	Probability	Main value driver assumptions (baseline from the basic scenario: 4.5% growth; 16.5% EBIT margin; 4% capex/sales)
1a (Well prepared; successful transition)	€28.4	24% (60%*40%)	3 years of 3% growth rate, then back to 4.5% 3 years of 13% margins, then 20% 3 years of 6% capex/sales, then back to 4%
1b (Ill prepared; successful transition)	€10.4	16% (40%*40%)	-20% growth in 2023 and -15% growth in 2024, then 0% onwards* 3 years of 8% margins, then 11%
2a (Well prepared; unsuccessful transition)	€22.5	36% (60%*60%)	10 years of 3% growth rate 3 years of 13% margins, then back to 16.5% 3 years of 6% capex/sales, then back to 4%
2b (Ill prepared; unsuccessful transition)	€31.9	24% (60%*40%)	6% sales growth 18% margins
Overall	€24.2		

Below Inditex share price (as of January 2021), suggesting that the company is overvalued

# Valuing S and E at Inditex

22

- At present, information on E and S is often limited or missing, making valuation difficult
  
- To arrive at SV and EV, three steps need to be taken:
  1. **Materiality assessment:** determine important S and E factors
  2. **Quantification:** express these factors in their own units (Q)
  3. **Monetisation:** express these factors in money with shadow prices (SP)

# E and S in their own units

E factors	Unit
Contribution to/limitation of climate change	Tonnes of CO2 equivalent emissions
Contribution to/limitation of pollution	Tonnes of waste, by waste type; Tonnes of nitrogen & phosphorus used; Litres of freshwater used; etc.
Contribution to/limitation of availability of scarce natural resources	Number of forest acres converted; MSA reduction due to corporate activities, etc.

S factors	Unit
Client value of products & services	Client surplus (value - paid for)
Wellbeing of employment	Life satisfaction scores
Value to employees due to training and experience	Additional income
Effects on human health	Quality life years added or lost
Occupational health & safety incidents	Quality life years added or lost
Contribution to/limitation of poverty	Wage gap
Contribution to/limitation of human rights violations	Forced / underaged / discriminated / harassed workers

- Projecting future performance using historical numbers and targets
- Based on relation with other company KPIs and the company's activity levels
- Using the volume-component of sales as a proxy
- Inditex only has emission targets:
  - Scope 1 and 2: 90% reduction by 2030
  - Scope 3: 20% reduction by 2050
- Don't ask: what's in the company's annual report?
- Ask: what should be in the company's annual report that is currently not there?
- Double materiality: inwardly and outwardly material social and environmental factors should be included





# E and S in monetary terms

- Impact Weighted Accounts Framework (IWAF) provides monetisation factors / shadow prices
- Number of units x shadow price = monetary value

Key impact categories	Monetisation factor
Wellbeing of employment	\$2,647 per life satisfaction point (scale 0-100)
Effects on human health	\$119,000 per DALY (disability adjusted life year)
Occupational health & safety incidents	Fatal occupational accidents: \$3,540,000 per accident Occupational injuries with breach of H&S standards: \$3,840 per accident
Contribution to/limitation of climate change	\$224 per tonne of CO <sub>2</sub> equivalent (eq)
Contribution to/limitation of pollution – air pollution	Human toxicity: \$119,000 per DALY Nitrogen deposition NH <sub>3</sub> from animal husbandry: \$18.10/kg NH <sub>3</sub> eq Particulate Matter (PM) formation: \$75/kg PM <sub>2.5</sub> eq
Contribution to/limitation of pollution – water pollution	Freshwater eutrophication: \$290/kg P eq to freshwater Marine eutrophication: \$20.10/kg N eq to marine water
Contribution to/limitation of availability of scarce natural resources	Land occupation – tropical forest \$3,030/(MSA*ha*yr) Land occupation – other forest \$1,450/(MSA*ha*yr) Scarce blue water use \$1.49/m <sup>3</sup>
Contribution to/limitation of poverty	Underpayment in the value chain – Wage gap of workers earning below minimum wage \$1.56 per \$1 of wage gap
Contribution to/limitation of human rights violations	Underage workers – below minimum age (12 or 13) for light work in non-hazardous economic work \$21,600/child FTE Forced workers – \$17.200/FTE Harassment – workers who experienced severe physical sexual harassment \$85,800/worker Lack of freedom of association \$527/violation



# True price of jeans

27

- Besides emission data, the required E and S data is lacking
- Using the true price of jeans, as determined by the Impact Institute (2019), the relative E and S values can be estimated

	Cotton cultivation	Denim textile production	Jeans manufacturing	Transport	Total
GHG emissions as a percentage of E	2%	12%	0.5%	0.1%	15%
S as a percentage of E	33%	140%	30%	0%	202%

Assuming an average sales price per jeans of €80:	Cotton cultivation	Denim textile production	Jeans manufacturing	Transport	Total
GHG emissions/sales price	0.3%	1.6%	0.1%	0.0%	2%
Other E/sales price	6%	6%	0%	0%	12%
S/sales price	5%	19%	4%	0%	28%
S excluding 50% of bonded labour/sales price	4%	12%	4%	0%	20%

S	Cotton cultivation	Denim textile production	Jeans manufacturing	Transport	Total
Discrimination	€ 0.05	€ 0.10	€ 0.10		€ 0.25
Occupational H&S risk	€ 0.15	€ 0.40	€ 0.20		€ 0.75
Overtime	€ 0.20	€ 0.05	€ 0.25		€ 0.50
Denied freedom of association		€ 0.45	€ 0.60		€ 1.05
Harassment		€ 0.95	€ 1.65		€ 2.60
Child labour	€ 0.60	€ 1.40	€ 0.10		€ 2.10
Insufficient income	€ 0.75				€ 0.75
Insufficient wages & social security	€ 0.70	€ 1.10	€ 0.25		€ 2.05
Bonded labour	€ 1.10	€ 10.85			€ 11.95
<b>S total</b>	<b>€ 3.55</b>	<b>€ 15.30</b>	<b>€ 3.15</b>	<b>€ 0.00</b>	<b>€ 22.00</b>

E	Cotton cultivation	Denim textile production	Jeans manufacturing	Transport	Total
Materials use	€ 0.05	€ 0.03			€ 0.08
Energy use	€ 0.20	€ 1.80	€ 0.03	€ 0.02	€ 2.05
GHG emissions	€ 0.25	€ 1.30	€ 0.05	€ 0.01	€ 1.61
Land use	€ 0.25				€ 0.25
Soil pollution	€ 0.35				€ 0.35
Air pollution		€ 1.57	€ 0.02	€ 0.01	€ 1.60
Water pollution	€ 0.95	€ 0.85		€ 0.01	€ 1.81
Water use	€ 2.80	€ 0.30	€ 0.05		€ 3.15
<b>E total</b>	<b>€ 4.85</b>	<b>€ 5.85</b>	<b>€ 0.15</b>	<b>€ 0.05</b>	<b>€ 10.90</b>
<b>Total S &amp; E (rounded)</b>	<b>€ 8.40</b>	<b>€ 21.15</b>	<b>€ 3.30</b>	<b>€ 0.05</b>	<b>€ 32.90</b>

Source: Impact Institute (2019)

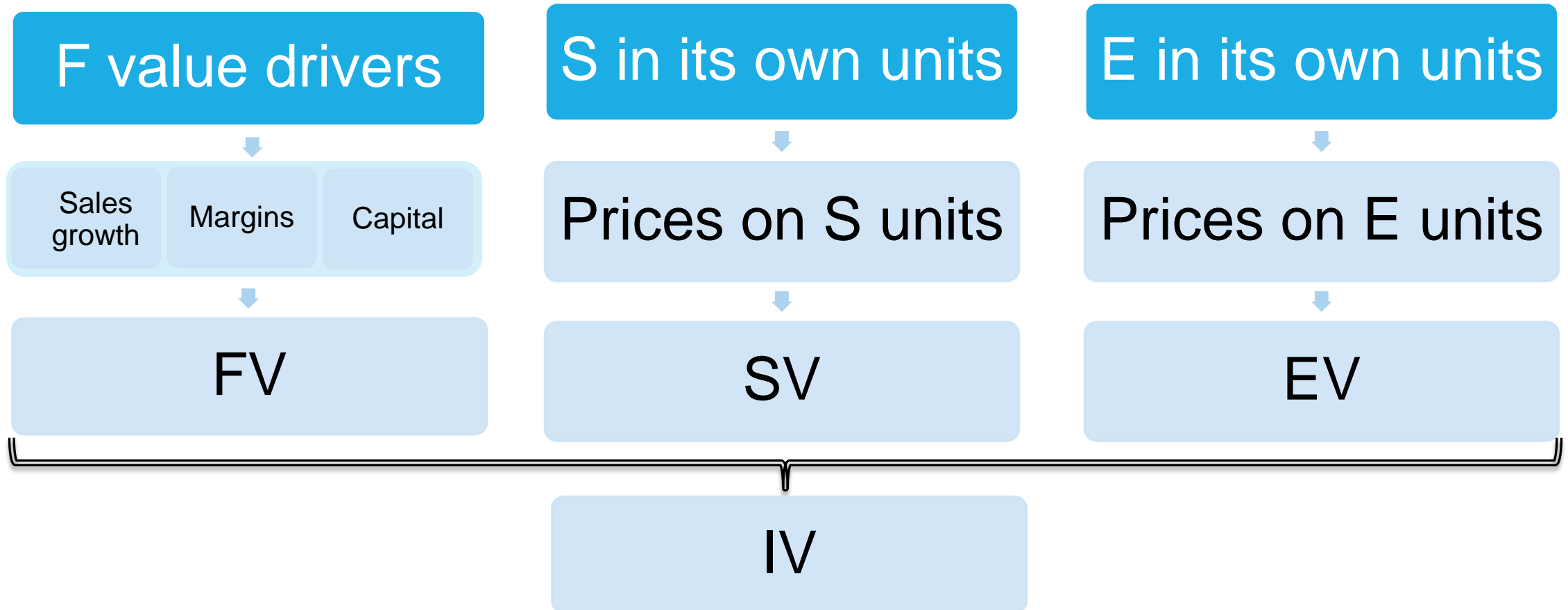






# Integrated value

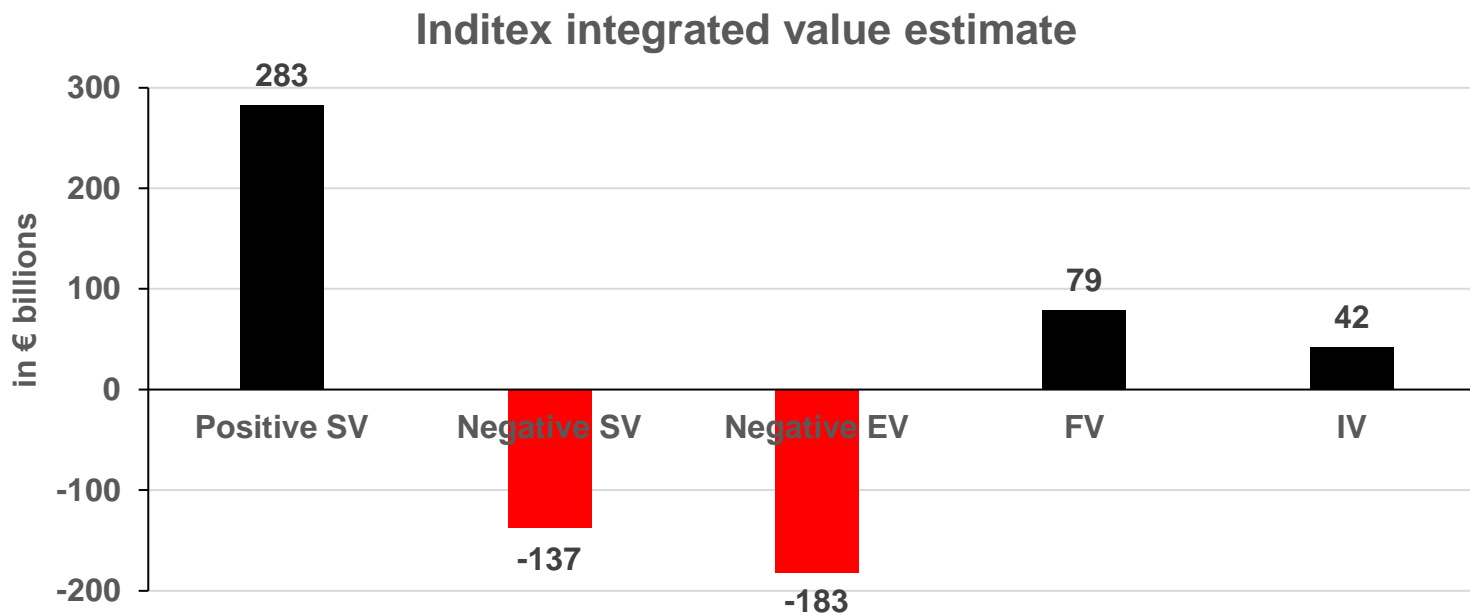
31



# Calculating Inditex's integrated value

32

- Assuming the basic IV model with equal weights ( $b = c = 1$ ), we arrive at an integrated value of €42 billion



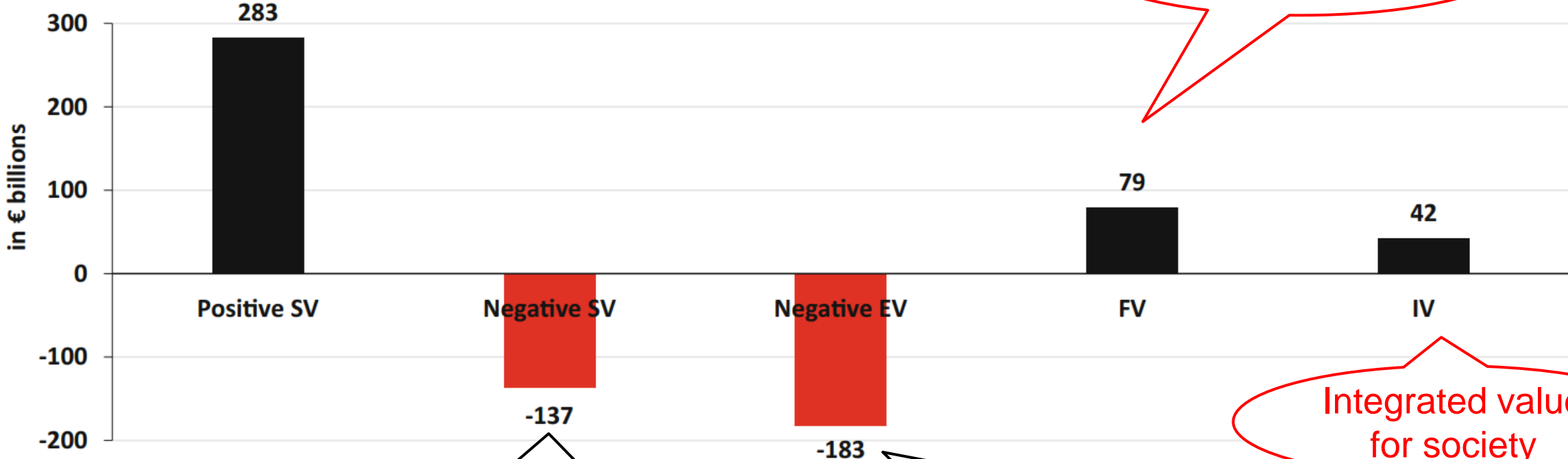
IV calculation (equal weights)	Value (Euro billions)
FV (enterprise value)	79
Positive SV	283
Negative SV	-137
Negative EV	-183
IV (integrated value)	42



# Key components of integrated valuation

- 1. Consumer surplus
- 2. Employment
- 3. Taxes

Inditex integrated value estimate



Strong consumer brand

Underpayment in Asian garment factories

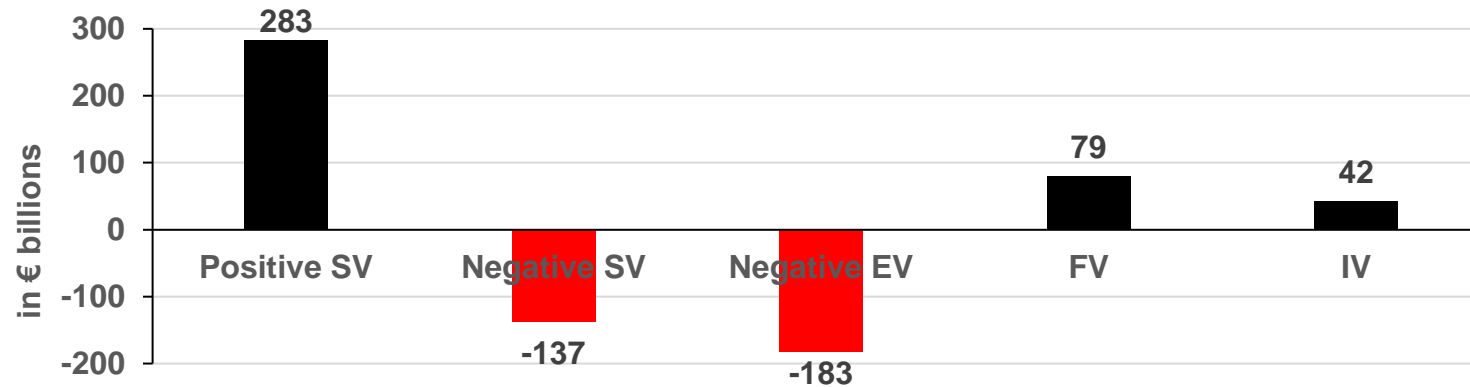
Environmental pollution: cotton, production, burning, transport

Integrated value for society

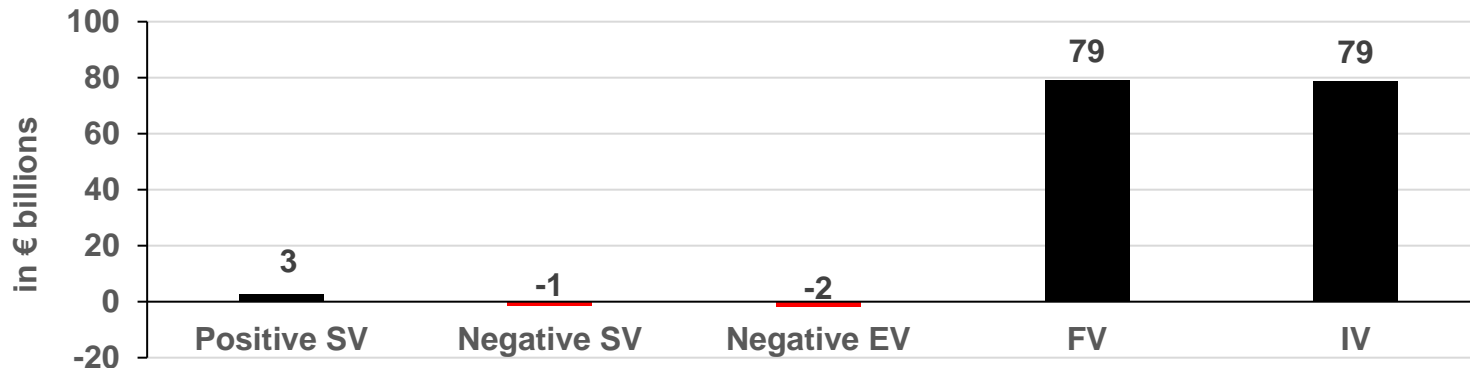
# Shareholder model vs. integrated model

34

- Integrated model with equal weights ( $b = c = 1$ )



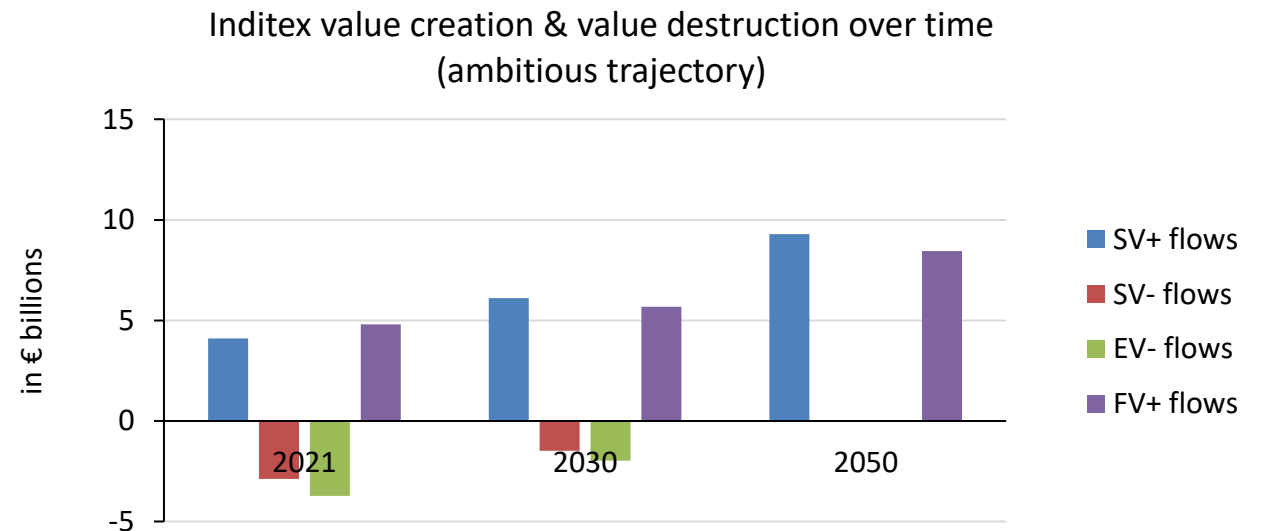
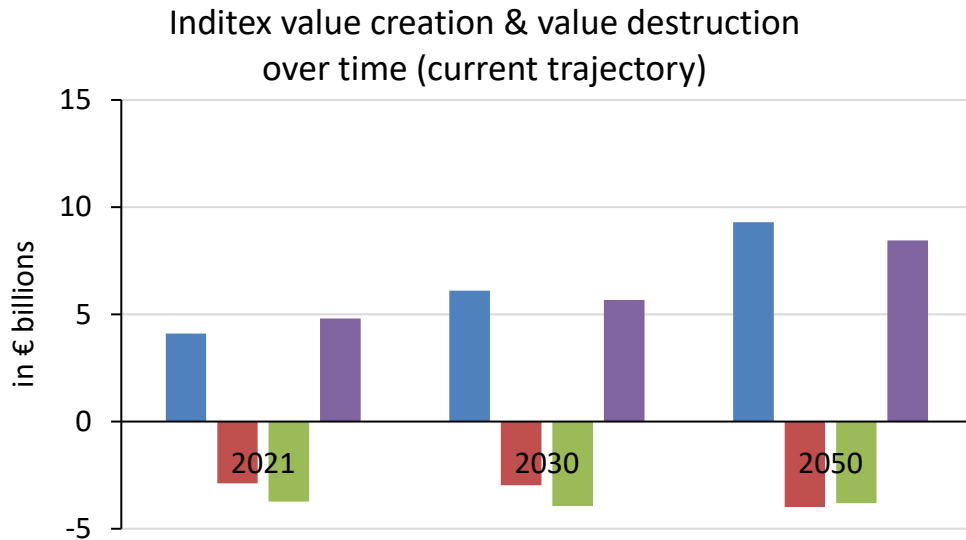
- Shareholder model with  $b = c = 0.01$



# Future value creation profiles

35

- Projections of company's future value creation profile answer key questions:
  - What is the path to a healthy business where FV, SV and EV are all  $> 0$ ?
  - Is Inditex doing the right things to be on that healthy path?



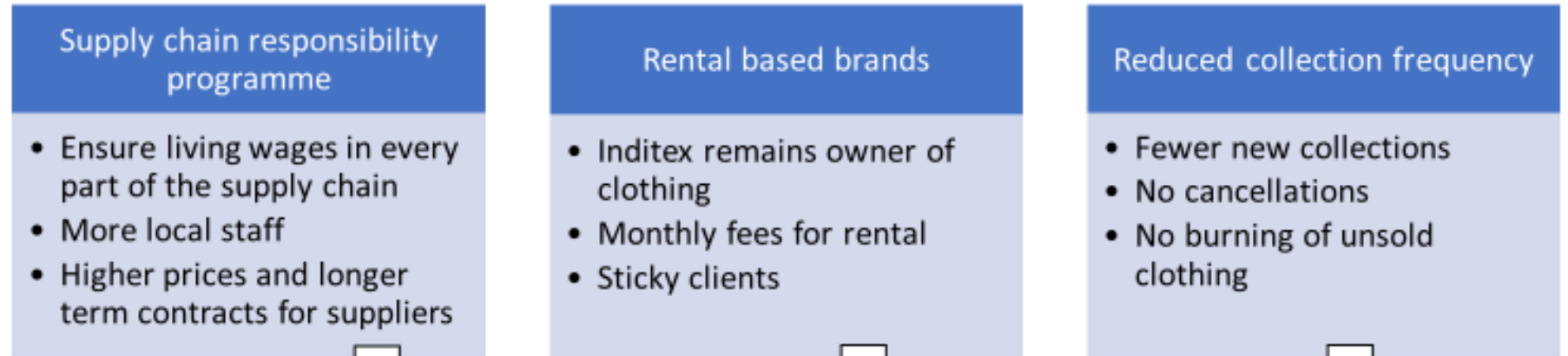
# Communicating on integrated value

36

Hypothetical  
investor  
presentation  
slide for  
Inditex

## Value creation strategy & value driver effects

Aggressively reducing value destruction on SV & EV by means of:



FV effect	Higher costs (-), higher pricing (+)	Capex & costs up due to investment in brands (-)	Production volume growth slows (-), prices up (+), services growth (+)
SV effect	++	+	+
EV effect	+	++	++

# Conclusions

37

- This analysis of Inditex shows that it is possible to (roughly) estimate a company's *SV* and *EV* from the outside
- The language of business is money, and by expressing *S* and *E* in monetary terms, we make them visible, and more likely to be managed
- Much crucial data is missing, forcing us to make a lot of assumptions
- Despite imprecise estimates, the analysis is valuable:
  - To companies: it shows where the problems and trade-offs are
  - On a system level: gives an indication of the kind of data that is needed