CORPORATE FINANCE FOR LONG-TERM VALUE

Chapter 11: Case Study Integrated Valuation: Inditex

Part 3: Valuation of companies

Chapter 11: Case Study Integrated Valuation: Inditex

The BIG Picture

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⁺)
- □ At the cost of workers in supply chain (SV⁻) and environment (cotton, pollution, burning) (EV⁻)
- □ Integrated valuation reflect these facts: SV⁺, SV⁻ and EV⁻ components larger than FV
- Many assumptions needed in analysis as company information on sustainability is very limited

Inditex case study



Overview: Fully integrated Store&Online Multi-concept approach Global presence Stores/Online Market cap. €86 bn



- 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

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Sales (€ billions)	13.8	15.9	16.7	18.1	20.9	23.3	25.3	26.1	28.2	20.4
Sales growth	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

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

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

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."

Profit formula

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

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

- 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)





ers

Suppliers



E

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 fo	cus 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	o local suppliers				
Suppliers	Profitability, growth and stability	Profitability and growth probably better than not stability: unreliable as orders are e	•				
Nature (Inditex: environment)	Operate within planetary boundaries	Hurt by high GHG emissions and waste					
Investors (Inditex: shareholders)	High financial returns	So far, yes	1				
Governments (Inditex: community)	Economic activity & taxes	Yes					
Note: Authors' assessments. We identify rou	uply the same stakeholders as Inditex does, but so	me with different labels as	Main frictions as a				

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

Main frictions as a result of business model

Financially material sustainability issues

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

- 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)

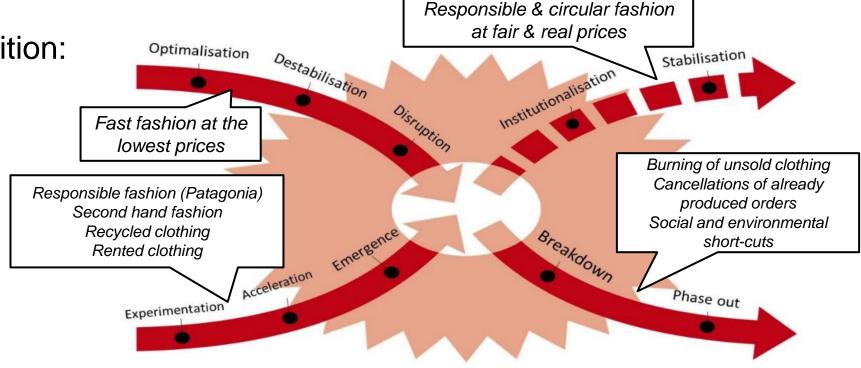
External impacts

Key impact categories	Likely positive or negative	Problematic if substantially negative	Key impact categories	Likely positive or negative	Problematic if substantially negative
Profit	Р		Value to employees due to	Р	
Salaries	Р		training and experience	-	
Interest payments	Р		Effects on human health	Ν	potentially
Taxes	P		Occupational health & safety incidents	Ν	potentially
Payments to suppliers	Р		Time invested by employees	Ν	
Payments from clients	Ν		Contribution to/limitation of climate change	Ν	potentially
Cost of capital	Ν		Contribution to/limitation of		
Change in fixed assets	?		pollution*	Ν	potentially
Client value of products	Р		Contribution to/limitation of		
Client value of services	N/A		availability of scarce natural resources**	Ν	potentially
Value of impact materials	Ν	potentially	Contribution to/limitation of		
Creation of intellectual	Р		poverty	Both	potentially
capital	0		Contribution to/limitation of	Ν	potentially
Wellbeing of employment	?	potentially	human rights violations		,

Transition

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

- 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_i) quite high at 0.8

Management

- 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

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Inditex	grey: histor	ical		bla	ck: ass	sump	tions	v	/hite: c	alcula	ited		WACC	7.8%		TV growth:	2%
1-1-2021																	
Malas daisan asamantisan		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
Value driver assumptions Sales growth			3.2%	0.20/	-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					7.4%	16.5%	16.5%	16.5%	4. 5%	16.5%	16.5%	16.5%	16.5%	16.5%	4. 5%	4 .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%
Value drivers (in euro millions)																	
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: E	nterprise value	79064	1		V calculation												101050
	Other assets	0		Termina	al Value (TV) Period	1	2	3	4	5	6	7	8	9	10	11	101959 11
C	Company value	79064	1		count factror		0.861	0.798	0.704	0.687	0.637	0.591	0.548	0.509		0.438	0.438
	Net debt	-3089			nt value (PV) erprise value	4460 79064	3436	3331	3228	3129	3033	2940	2850	2763	2678	2596 TV	44620 56%
	Equity value	82153															
Number of diluted shar	. ,	3110	,		R <i>4</i>	- ماله -	d. net						41a a				
	tock price euro	26.4	-					/erse-	0								
	· ·				CI	irren	t stor	ck prid	ce (th	e ma	rket's	opin	ion)				
Stock price, 4	🛿 January 2021 🍢	26.4			50			n più		s ma		Shin					

Calculating Inditex's cost of capital

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$$WACC = \frac{E}{V} \cdot r_E + \frac{D}{V} \cdot r_D$$

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Company
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Explained in Chapter 12
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Cost of equity $r_E = r_f + \beta_i \cdot (E[r_{MKT}] - r_f) = 1.5\% + 1.21 * 5\% = 7.6\%$
Cost of equity $r_E = r_f + \beta_i \cdot (E[r_{MKT}] - r_f) = 1.5\% + 1.21 * 5\% = 7.6\%$

□ Cost of debt $r_D = r_f + AA$ spread = 1.5% + 1.0% = 2.5%

□ Enterprise value V = E + D = €82.2 - €3.1 = €79.1 billion

□ Inditex's
$$WACC = \frac{E}{V} \cdot r_E + \frac{D}{V} \cdot r_D = 1.04 * 7.6\% - 0.04 * 2.5\% = 7.8\%$$

Transition valuation scenarios

- 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

- □ 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 (III 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% [*]		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€31.924(III prepared; unsuccessful transition)		24% (60%*40%)	6% sales growth 18% margins
Overall	hare price (as of January 2021), the company is overvalued		

Valuing S and E at Inditex

- 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 their own units

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Production & energy use	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Garments placed on the market (in thousands of tonnes)	511.2	528.8	545.0	450.1	607.7	604.7	601.6	598.6	595.6	592.7	589.7	586.7	583.8	580.9	578.0
change		3%	3%	-17%	35.0%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
Global energy consumption (GJ)	6.8	7.1	6.8	4.6	6.1	5.9	5.8	5.6	5.5	5.4	5.2	5.1	5.0	4.8	4.7
change		4%	-4%	-33%	33.0%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%
Energy needs covered with renewables	41%	45%	63%	81%	83.0%	85.0%	87.0%	89.0%	91.0%	93.0%	95.0%	97.0%	97.0%	97.0%	97.0%
Fossil-based energy consumption (GJ)	4.0	3.9	2.5	0.87	1.03	0.89	0.75	0.62	0.49	0.38	0.26	0.15	0.15	0.15	0.14
change		-3%	-35%	-66%	19%	-14%	-16%	-18%	-20%	-24%	-30%	-42%	-3%	-2%	-3%
E	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Contribution to climate change															
Scope 1 + 2 emissions (T CO2eq), millions	0.49	0.51	0.35	0.12	0.14	0.12	0.10	0.09	0.07	0.05	0.04	0.02	0.02	0.02	0.02
Change		4%	-31%	-65%	19.0%	-14.0%	-15.5%	-17.5%	-20.2%	-24.2%	-30.4%	-41.5%	-2.5%	-2.5%	-2.5%
Scope 3 emissions (T CO2eq), millions	na	na	20.15	14.89	19.80	19.31	18.82	18.35	17.89	17.45	17.01	16.59	16.17	15.77	15.37
change				-26%	33.0%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%
Scope 3 as a % of total emissions	na	na	98.3%	99.2%	99.3%	99.4%	99.4%	99.5%	99.6%	99.7%	99.8%	99.9%	99.9%	99.9%	99.9%
Total emissions (T CO2eq), millions			20.50	15.01	19.95	19.43	18.93	18.44	17.96	17.50	17.05	16.61	16.19	15.79	15.39
				-27%	33%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%	-3%
Contribution to pollution	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Contribution to availability of scarce natural resources	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Contribution to nitrogen & phosphorus cycles Contribution to deforestation	?	?	?	? ?	?	? ?	? ?	? ?	? ?						
Freshwater use	י ר	? 2	? 2	? ?	؛ ?										
Contribution to biodiversity loss	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
S	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Client value of products & services	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Wellbeing of employment	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Value to employees due to training and experience	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Effects on human health Occupational health & safety incidents	?	?	?	?	?	?	?	? ?	?	?	?	?	?	?	?
Contribution to poverty	?	?	? 2	? ?	? 2	, 2	? ?	? ?	? ?	? 2	? 2	? ?	? ?	? ?	? 2

Contribution to human rights violations

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 ₂ equivalent (eq)
Contribution to/limitation of pollution – air pollution	Human toxicity: \$119,000 per DALY Nitrogen deposition NH ₃ from animal husbandry: \$18.10/kg NH ₃ eq Particulate Matter (PM) formation: \$75/kg PM2.5 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 ³
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

E flows and EV for climate change

- □ Scope 3 emissions are assumed to be 50% attributable to Inditex and 50% to their supply chain
- □ Carbon price is projected to increase by 3.5% each year

E flows (climate change)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Contribution to climate change												
Total emissions (T CO2eq), millions	15.0	19.9	19.4	18.9	18.4	18.0	17.5	17.0	16.6	16.2	15.8	15.4
Percentage attributable to Inditex	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Attributed emissions	7.5	10.0	9.7	9.5	9.2	9.0	8.7	8.5	8.3	8.1	7.9	7.7
Carbon price, Euro	138	204	211	218	226	234	242	250	259	268	278	287
change in carbon price		47%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Cost of emissions (CO2eq), Euro billions	-1.04	-2.03	-2.05	-2.06	-2.08	-2.10	-2.12	-2.13	-2.15	-2.17	-2.19	-2.21
Cost of negative EV capital		2.2%										
Terminal Value (TV)			-									-100.5
Period		1	2	3	4	5	6	7	8	9	10	10
Discount factor		0.98	0.96	0.94	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.80
Present value (PV)		-2.0	-2.0	-1.9	-1.9	-1.9	-1.9	-1.8	-1.8	-1.8	-1.8	-82.6
Sum of PV, Euro billions		-101.3										

True price of jeans

- 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
S total	€ 3.55	€ 15.30	€ 3.15	€ 0.00	€ 22.00
	Cotton	Danim tantila			
E	cultivation	Denim textile production	Jeans manufacturing	Transport	Total
				Transport	Total € 0.08
	cultivation	production		Transport € 0.02	
Materials use Energy use	cultivation € 0.05	production € 0.03	manufacturing		€ 0.08
Materials use Energy use GHG emissions	cultivation € 0.05 € 0.20	production € 0.03 € 1.80	manufacturing € 0.03	€ 0.02	€ 0.08 € 2.05
Materials use	cultivation € 0.05 € 0.20 € 0.25	production € 0.03 € 1.80	manufacturing € 0.03	€ 0.02	€ 0.08 € 2.05 € 1.61
Materials use Energy use GHG emissions Land use	€ 0.05 € 0.20 € 0.25 € 0.25	production € 0.03 € 1.80	manufacturing € 0.03	€ 0.02	€ 0.08 € 2.05 € 1.61 € 0.25
Materials use Energy use GHG emissions Land use Soil pollution	€ 0.05 € 0.20 € 0.25 € 0.25	€ 0.03 € 1.80 € 1.30	<pre>manufacturing € 0.03 € 0.05</pre>	€ 0.02 € 0.01	€ 0.08 € 2.05 € 1.61 € 0.25 € 0.35
Materials use Energy use GHG emissions Land use Soil pollution Air pollution	cultivation € 0.05 € 0.20 € 0.25 € 0.25 € 0.25 € 0.35	♥ 0.03 € 0.03 € 1.80 € 1.30	<pre>manufacturing € 0.03 € 0.05</pre>	€ 0.02 € 0.01 € 0.01	€ 0.08 € 2.05 € 1.61 € 0.25 € 0.35 € 1.60
Materials use Energy use GHG emissions Land use Soil pollution Air pollution Water pollution	cultivation € 0.05 € 0.20 € 0.25 € 0.25 € 0.25 € 0.25 € 0.25 € 0.25 € 0.25 € 0.25 € 0.25 € 0.25	production € 0.03 € 1.80 € 1.30 € 1.57 € 0.85	<pre>manufacturing € 0.03 € 0.05 € 0.02</pre>	€ 0.02 € 0.01 € 0.01	€ 0.08 € 2.05 € 1.61 € 0.25 € 0.35 € 1.60 € 1.81

Source: Impact Institute (2019)

Calculating EV

□ To calculate total EV:

- Either do 6x value of GHG emissions impacts 2% of GHG / sales vs. 12% other E / sales
 - GHG impact as a percentage of sales is much higher for Inditex (7%) than for jeans example
- Assume 4% annual improvement, 50% attribution to Inditex and discount rate of 2.2%

Results in total EV of – € 182.5 billion

	Cotton cultivation	Denim textile production	Jeans manufacturin g	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%

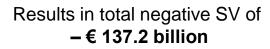
Assuming an average sales price per jeans of €80:	Cotton cultivation	Denim textile production	Jeans manufacturin g	Transport	Total
GHG emissions/sales price	0.3%	1.6%	0.1%	0.0%	2%
Other E/sales price S/sales price	6% 5%	6% 19%	0% 4%	0% 0%	12% 28%
S excluding 50% of bonded labour/sales price	4%	12%	4%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

E flavor												
E flows	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Cost of emissions (CO2eq), attributed, euro billions	-1.04	-2.03	-2.05	-2.06	-2.08	-2.10	-2.12	-2.13	-2.15	-2.17	-2.19	-2.21
Cost of other E issues as a percentage of sales	12.0%	11.5%	11.1%	10.6%	10.2%	9.8%	9.4%	9.0%	8.7%	8.3%	8.0%	7.7%
Sales, euro billions	20.4	29.6	30.9	32.3	33.8	35.3	36.9	38.5	40.3	42.1	44.0	45.9
Cost of other E issues	-2.45	-3.41	-3.42	-3.43	-3.44	-3.45	-3.46	-3.47	-3.49	-3.50	-3.51	-3.52
Percentage attributable to Inditex	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Cost of other E issues attributed, euro billions	-1.22	-1.70	-1.71	-1.71	-1.72	-1.73	-1.73	-1.74	-1.74	-1.75	-1.75	-1.76
Total E flows, Euro billions	-2.26	-3.73	-3.76	-3.78	-3.80	-3.82	-3.85	-3.87	-3.89	-3.92	-3.94	-3.97
Cost of negative EV capital		2.2%										
Terminal Value (TV)			•									-180.5
Terminal Value (TV) Period		1	2	3	4	5	6	7	8	9	10	-180.5 10
		1 0.98	2 0.96	3 0.94	4 0.92	5 0.90	6 0.88	7 0.86	8 0.84	9 0.82	10 0.80	
Period												10

Calculating negative SV

□ To calculate negative SV:

- Start with 28% of total sales from true price of jeans
 - Number is inflated by very high price for bonded labour, to be conservative we reduce this by 50%
- Arrive at negative S impacts of 20.3% of total sales
- Assume 4% annual improvement, 50% attribution to Inditex and discount rate of 2.2%





	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%

Negative S flows	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Negative S flows as a percentage of sales	20.3%	19.5%	18.7%	18.0%	17.2%	16.6%	15.9%	15.3%	14.6%	14.1%	13.5%	13.0%
Sales, Euro billions	20.4	29.6	30.9	32.3	33.8	35.3	36.9	38.5	40.3	42.1	44.0	45.9
Cost of negative S issues	4.14	5.77	5.78	5.80	5.82	5.84	5.86	5.88	5.90	5.91	5.93	5.95
Percentage attributable to Inditex	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Cost of neg. S issues attributed, Euro billions	2.07	2.88	2.89	2.90	2.91	2.92	2.93	2.94	2.95	2.96	2.97	2.98
Total negative S flows, Euro billions	-2.07	-2.88	-2.89	-2.90	-2.91	-2.92	-2.93	-2.94	-2.95	-2.96	-2.97	-2.98
Cost of negative SV capital		2.2%										
Terminal Value (TV)			-									-135.3
Period		1	2	3	4	5	6	7	8	9	10	10
Discount factor		0.98	0.96	0.94	0.92	0.90	0.88	0.86	0.84	0.82	0.80	0.80
Present value (PV)		-2.8	-2.8	-2.7	-2.7	-2.6	-2.6	-2.5	-2.5	-2.4	-2.4	-111.2
Sum of PV, Euro billions		-137.2										

Calculating positive SV

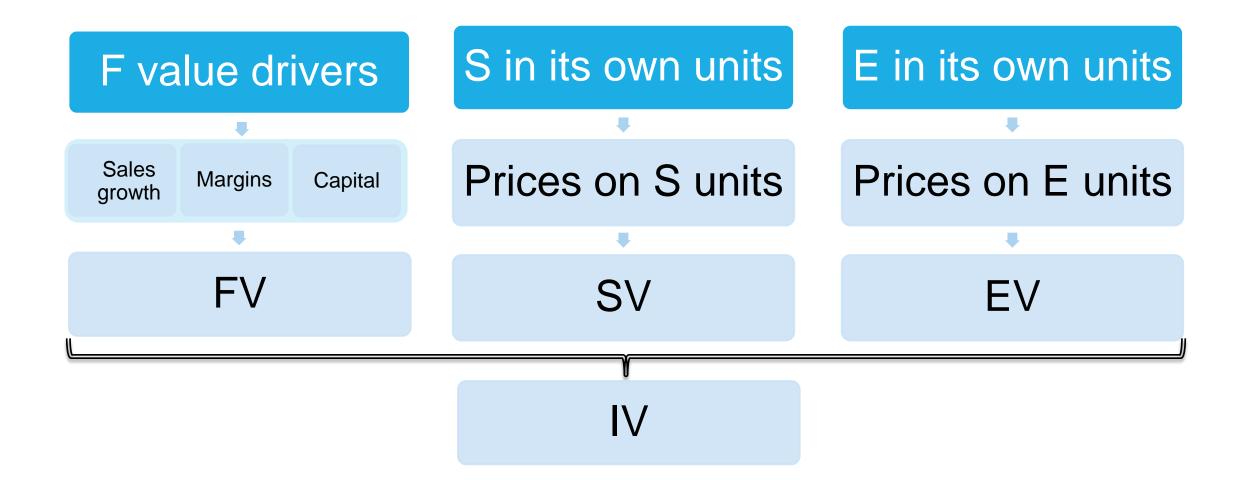
To calculate positive SV:

- □ Taxes paid of 4.3% of sales:
 - Corporate tax expense (3.7% of sales)
 - Property and environmental taxes (0.6% of sales)
- Consumer surplus of 7.2% of sales:
 - Assuming a price elasticity of demand of 3.452
 - 50% attribution to Inditex and 50% to supply chain
- Wellbeing of employment of 2.3% of sales:
 - Assuming two life satisfaction points of € 4,813
 - Multiplied by workforce gives € 694 million

Positive S flows 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 Paid taxes, Euro billions 0.5 1.3 1.3 1.5 1.5 1.6 1.7 1.7 1.8 1.9 2.0 1.4 % of sales 4.3% 4.3% 4.3% 4.3% 4.3% 2.2% 4.3% 4.3% 4.3% 4.3% 4.3% 4.3% Consumer surplus, Euro billions 1.5 2.1 2.2 2.3 2.4 2.6 2.7 2.8 2.9 3.0 3.2 3.3 % of sales 7.2% 7.2% 7.2% 7.2% 7.2% 7.2% 7.2% 7.2% 7.2% 7.2% 7.2% 7.2% Wellbeing of employment, Euro billions 0.7 0.7 0.7 0.8 0.8 0.8 0.9 0.9 0.9 1.0 1.0 1.1 % of sales 3.4% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% 2.3% **Total Positive S flows, Euro billions** 2.6 4.1 4.3 4.5 4.7 4.9 5.1 5.3 5.6 5.8 6.1 6.4 % of sales 12.9% 13.9% 13.9% 13.9% 13.9% 13.9% 13.9% 13.9% 13.9% 13.9% 13.9% 13.9% Cost of positive SV capital 2.2% Terminal Value (TV) 290.0 Period 2 3 4 5 6 7 8 9 10 10 1 Discount factor 0.98 0.96 0.94 0.94 0.90 0.88 0.86 0.84 0.82 0.80 0.80 Sum of PV, Euro billions 282.9

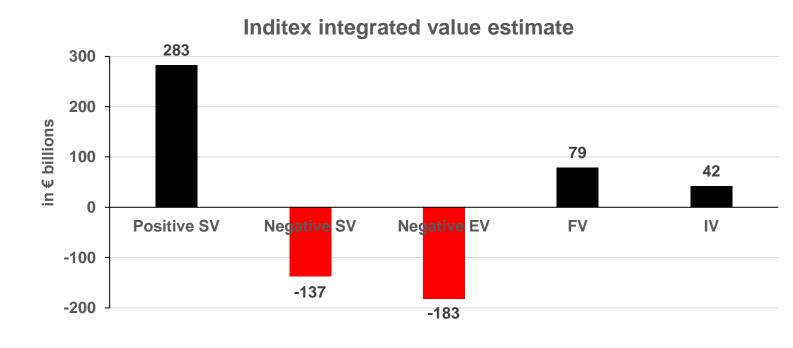
Results in total positive SV of € 282.9 billion

Integrated value



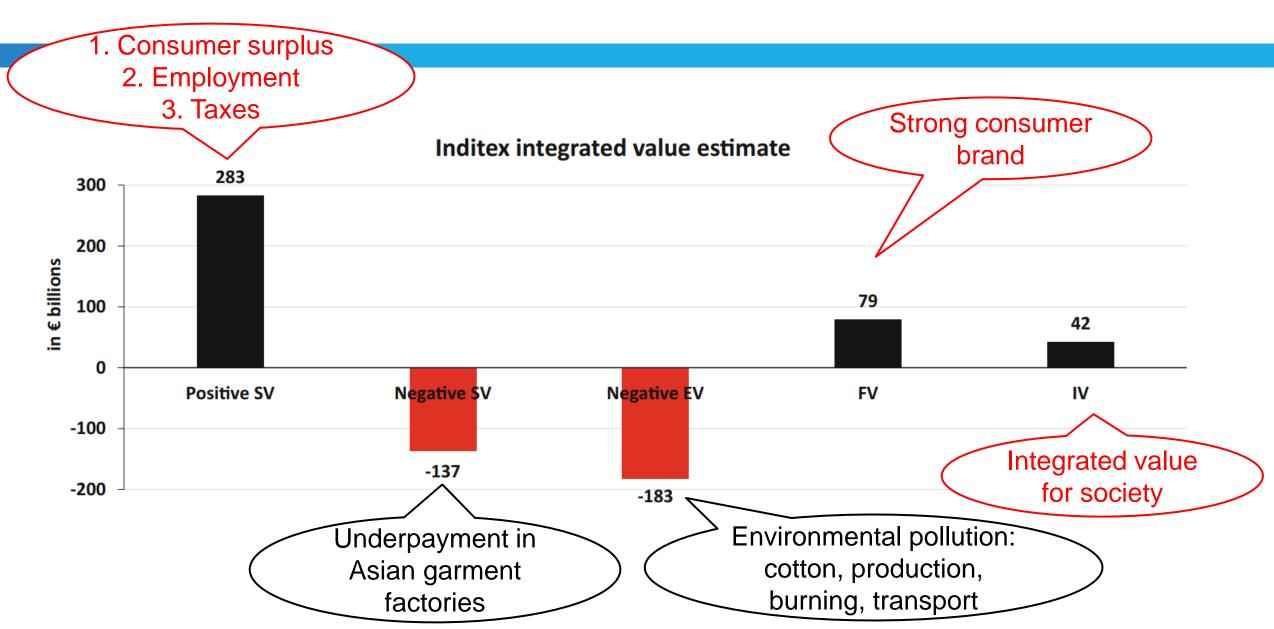
Calculating Inditex's integrated value

■ 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

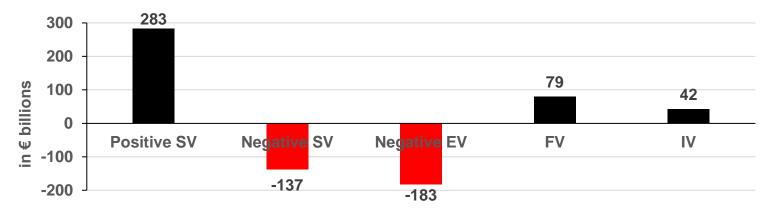
Key components of integrated valuation



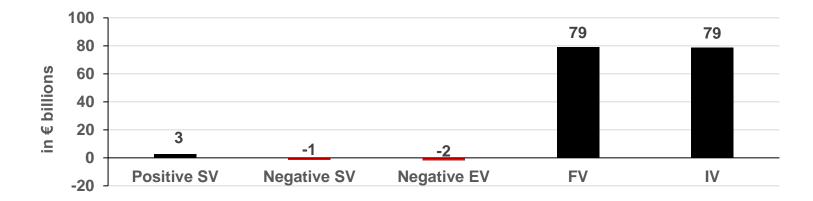
Shareholder model vs. integrated model

34

□ Integrated model with equal weights (b = c = 1)

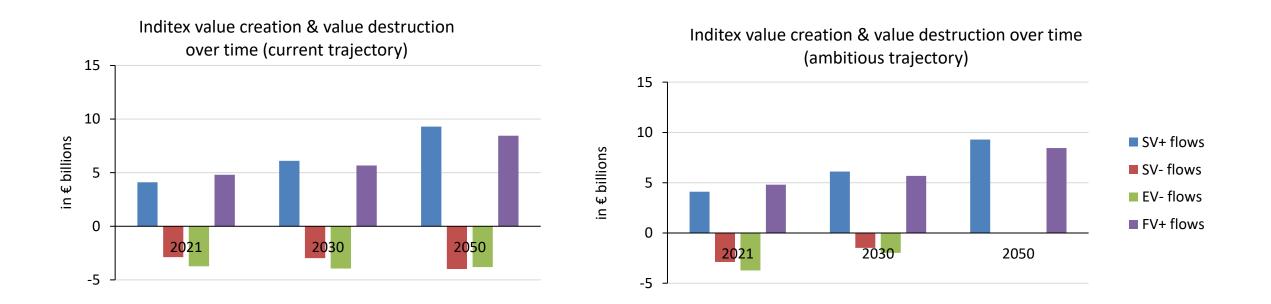


Shareholder model with b = c = 0.01



Future value creation profiles

- □ 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

Hypothetical

investor

presentation

slide for

Inditex

Value creation strategy & value driver effects

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

	ain responsibility ogramme	Re	ental based brands	Reduced collection frequency
part of theMore locaHigher pri	ing wages in every e supply chain al staff ices and longer tracts for suppliers	clothi	hly fees for rental	 Fewer new collections No cancellations No burning of unsold clothing
FV effect	Higher costs higher pricing		Capex & costs up du investment in brand	Production volume growth slows (-), prices up (+), services growth (+)
SV effect	++		+	+
EV effect	+		++	++

Conclusions

- 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