

3. Measuring & Managing Performance

Sub-Micron: Agenda

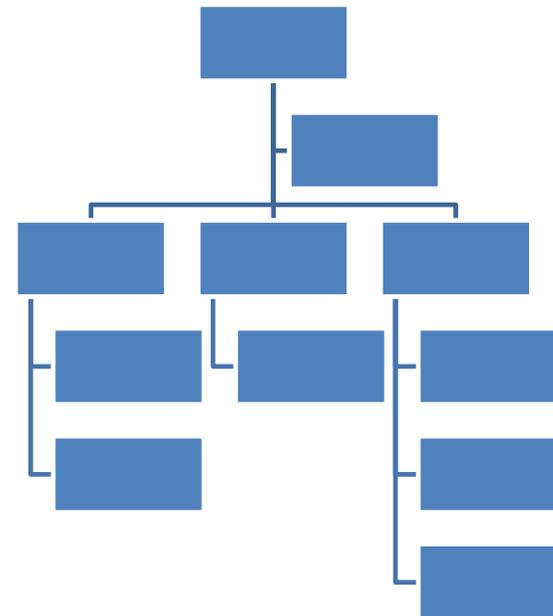
1. Context & Objective
2. Sub-Micron Devices
3. Overhead Allocation: Bad & Best Practices
4. Transfer Pricing
5. Summary
6. Outlook

Sub-Micron: Agenda

1. Context & Objective

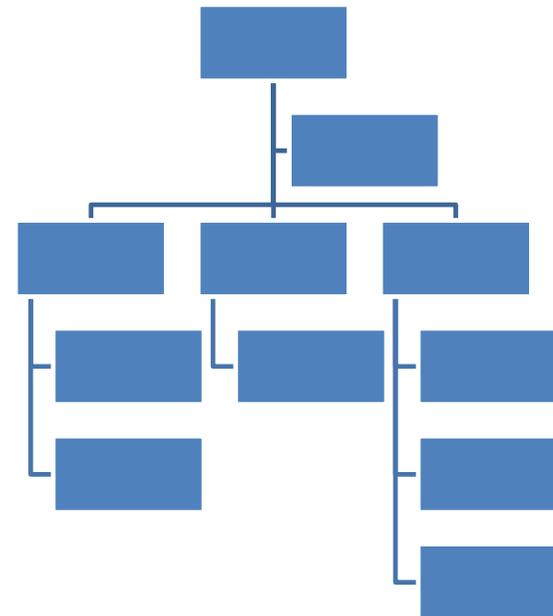
Organizations

- **Decentralization:**
 - Delegation: separation of stakes, taker of action \neq bearer of result.
 - Dispersion: division of labor across multiple people.



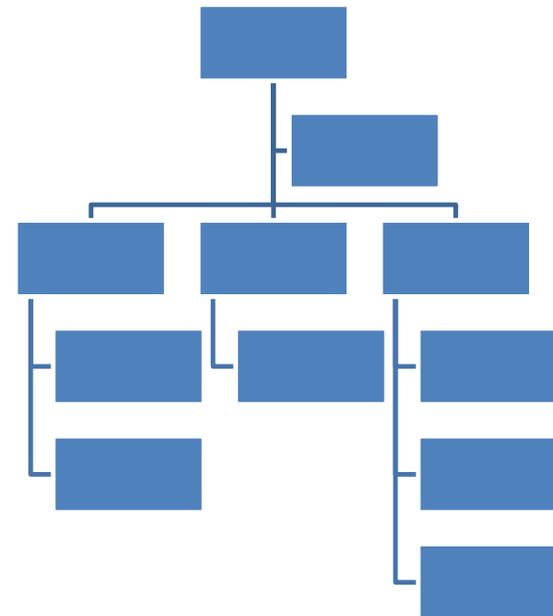
Organizations

- **Consequences:**
 - Conflict of interests.
 - Information incompleteness & asymmetries.
 - Adverse selection.
 - Global vs. local objectives.



Organizations

- Management Challenges:
 - Congruence.
 - Coordination.
 - Cooperation.
 - Communication.
 - Commitment.
 - Control.
 - Culture.



Sub-Micron: Agenda

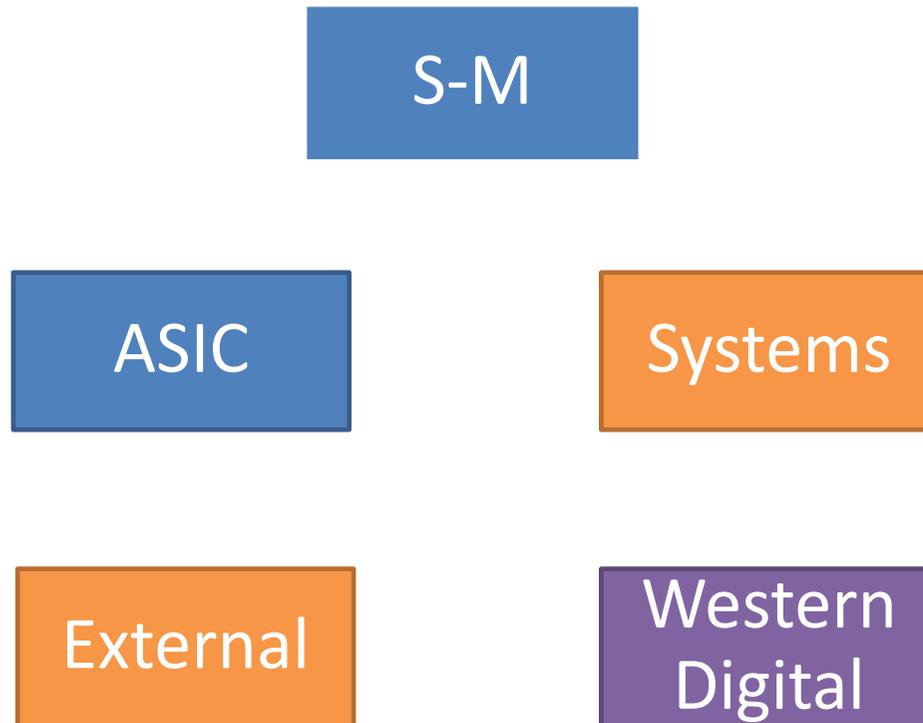
1. Context & Objective
2. Sub-Micron Devices

Vote: Yes or No?

Yes

No

Problem



Sub-Micron: Exh.2

Position (\$m)	Systems	External	W. Digital	ASIC
Revenues	333.5	135.0	0.0	468.5
Reported Costs	303.2	131.2	0.0	434.4
Accounting Profit	30.3	3.8	0.0	34.1

Sub-Micron: Exh.2

Position (\$m)	Systems	External	W. Digital	ASIC
Revenues	333.5	135.0	0.0	468.5
Reported Costs	303.2	131.2	0.0	434.4
Accounting Profit	30.3	3.8	0.0	34.1
Position (\$m)	Systems	External	W. Digital	ASIC
Revenues	290.5	135.0	120.0	545.5
Reported (!) Costs	264.1	117.6	130.0	511.7
Accounting Profit	26.4	17.4	-10.0	33.8
Δ Accounting Profit	-3.9	13.6	-10.0	-0.3

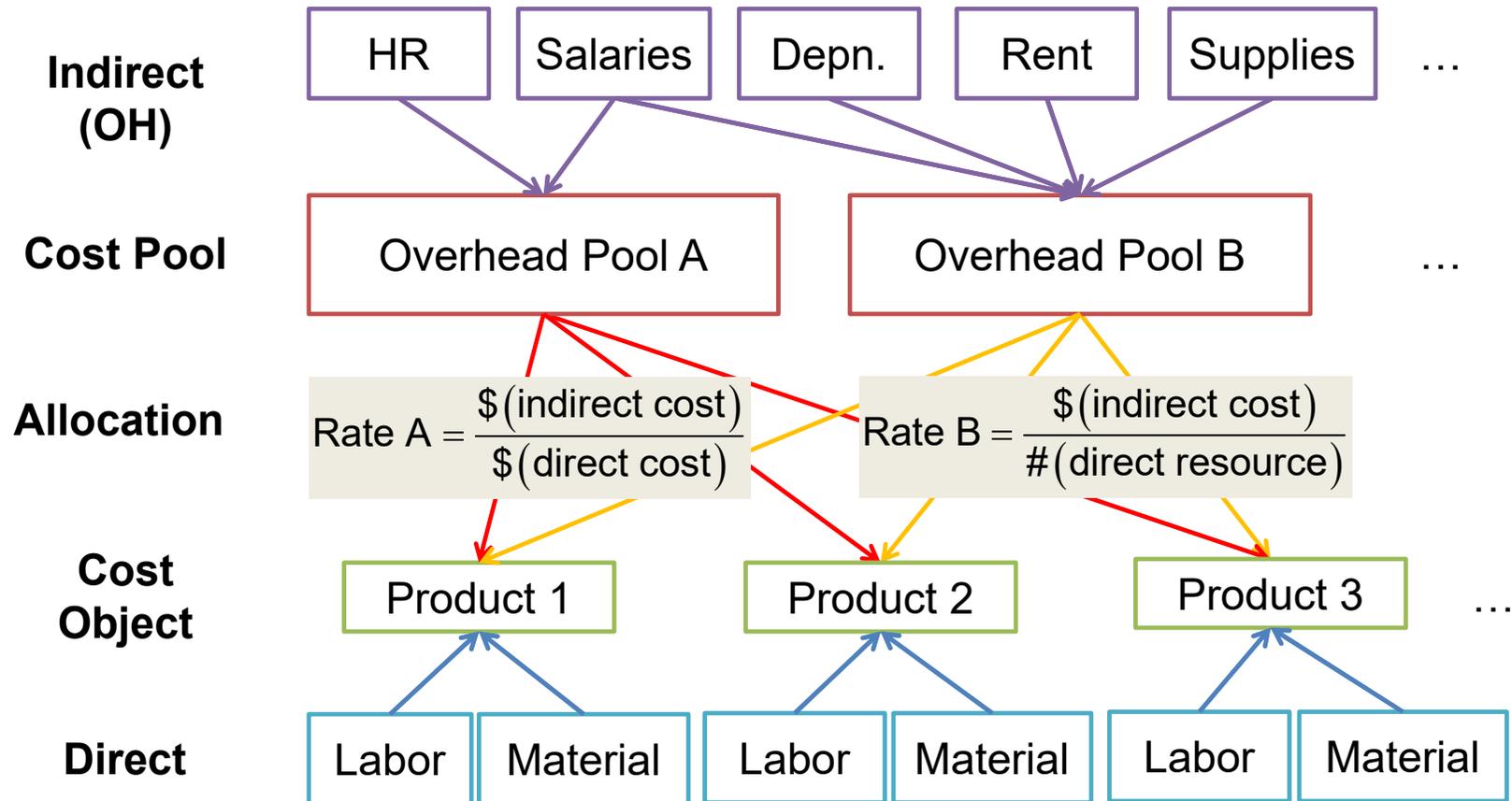
Sub-Micron: Agenda

1. Context & Objective
2. Sub-Micron Devices
3. Overhead Allocation: Bad & Best Practices

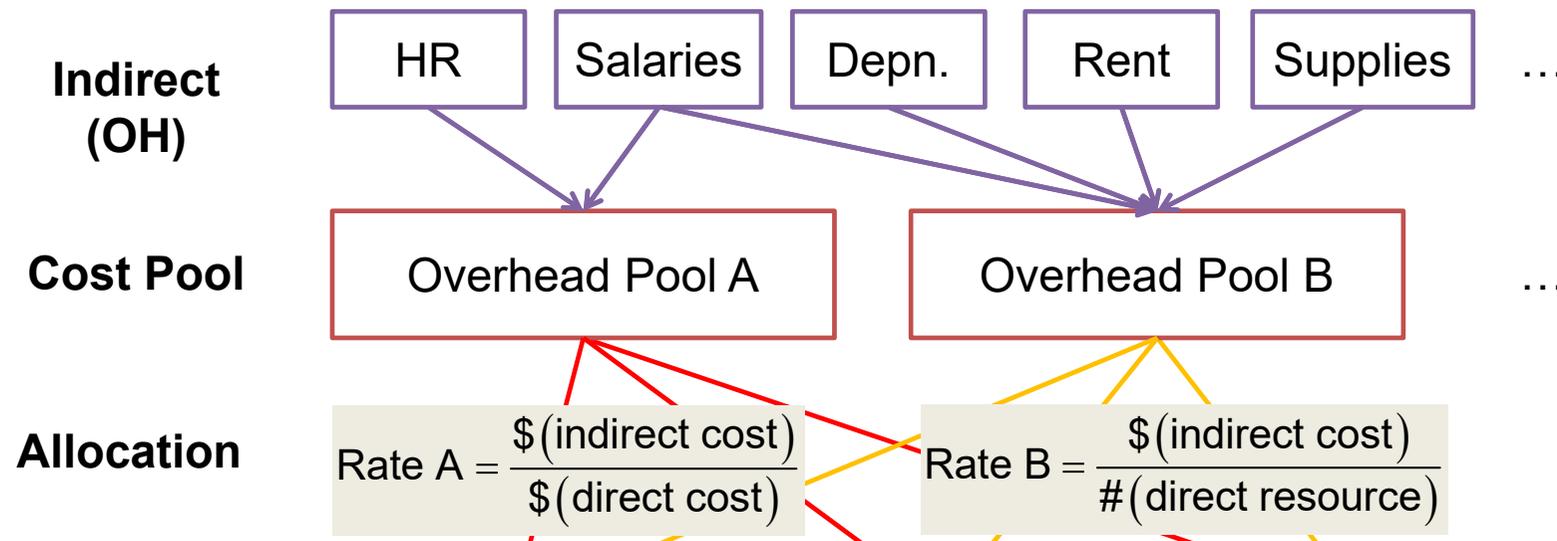
Cost System: Another Pitfall



Cost System



Cost System



- Main issues
 - Which allocation base (link of overhead to the decision object)? [Prior session.]
 - How to deal with fixed overhead?

Example: “Push” vs. “Pull”

- 2 Machines:
 - Fixed Cost (total): \$1,000.
 - Capacity (total): 100 hours.
- Product A:
 - Revenues (total): \$1,600. No variable costs.
 - Machine usage: 25 hours.
- Product B:
 - Revenues (total): \$300. No variable costs.
 - Machine usage: 25 hours.
- Questions:
 - If you produce only A, would you add B?
 - What are the profits of A and B?

Example: “Push” (A)

- Allocation rate based on **expected capacity use**:
 - Rate per hour = $\$1,000/25 \text{ hours} = \$40/\text{hour}$.

	A		Idle	Total
Hours	25		75	100
Revenues	\$1,600			\$1,600
Cost of Goods Sold	\$1,000			\$1,000
Profit	\$600			\$600

Example: “Push” (A+B)

- Allocation rate based on **expected capacity use**:
 - Rate per hour = $\$1,000/50 \text{ hours} = \$20/\text{hour}$.

	A	B	Idle	Total
Hours	25	25	50	25
Revenues	\$1,600	\$300		\$1,900
Cost of Goods Sold	\$500	\$500		\$1,000
Profit	\$1,100	-\$200		\$900

Example: “Pull” (A)

- Allocation rate based on **actual** capacity **availability**:
 - Rate per hour = $\$1,000/100 \text{ hours} = \$10/\text{hour}$.

	A		Idle	Total
Hours	25		75	100
Revenues	\$1,600			\$1,600
Cost of Goods Sold	\$250		\$750	\$1,000
Profit	\$1,350		-\$750	\$600

Example: “Pull” (A+B)

- Allocation rate based on **actual** capacity **availability**:
 - Rate per hour = $\$1,000/100 \text{ hours} = \$10/\text{hour}$.

	A	B	Idle	Total
Hours	25	25	50	100
Revenues	\$1,600	\$300		\$1,900
Cost of Goods Sold	\$250	\$250	\$500	\$1,000
Profit	\$1,350	\$50	-\$500	\$900

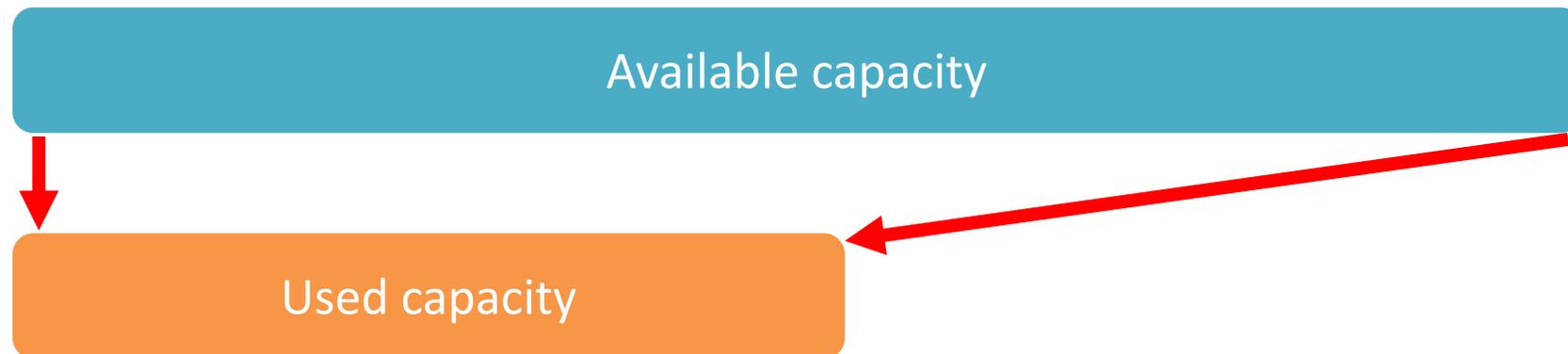
Fixed Overhead Allocation

Available capacity

Used capacity

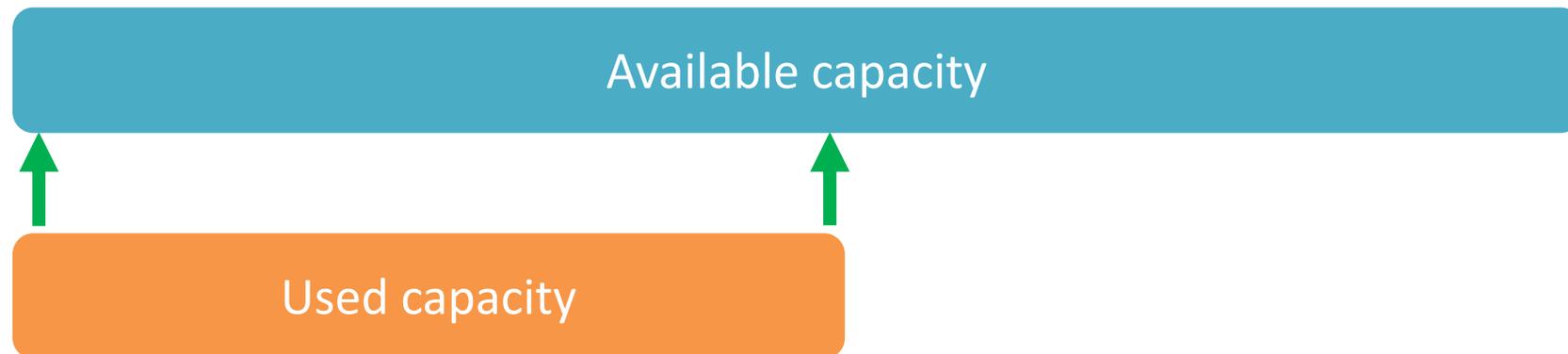
- Available productive capacity (e.g. machines, factories, support departments).
 - Measure of *resource supply*.
 - *Fixed overhead* cost.
- Used productive capacity (e.g. products, hours).
 - Measure of *resource demand*.
 - Variable cost *driver*.

“Push” Allocation



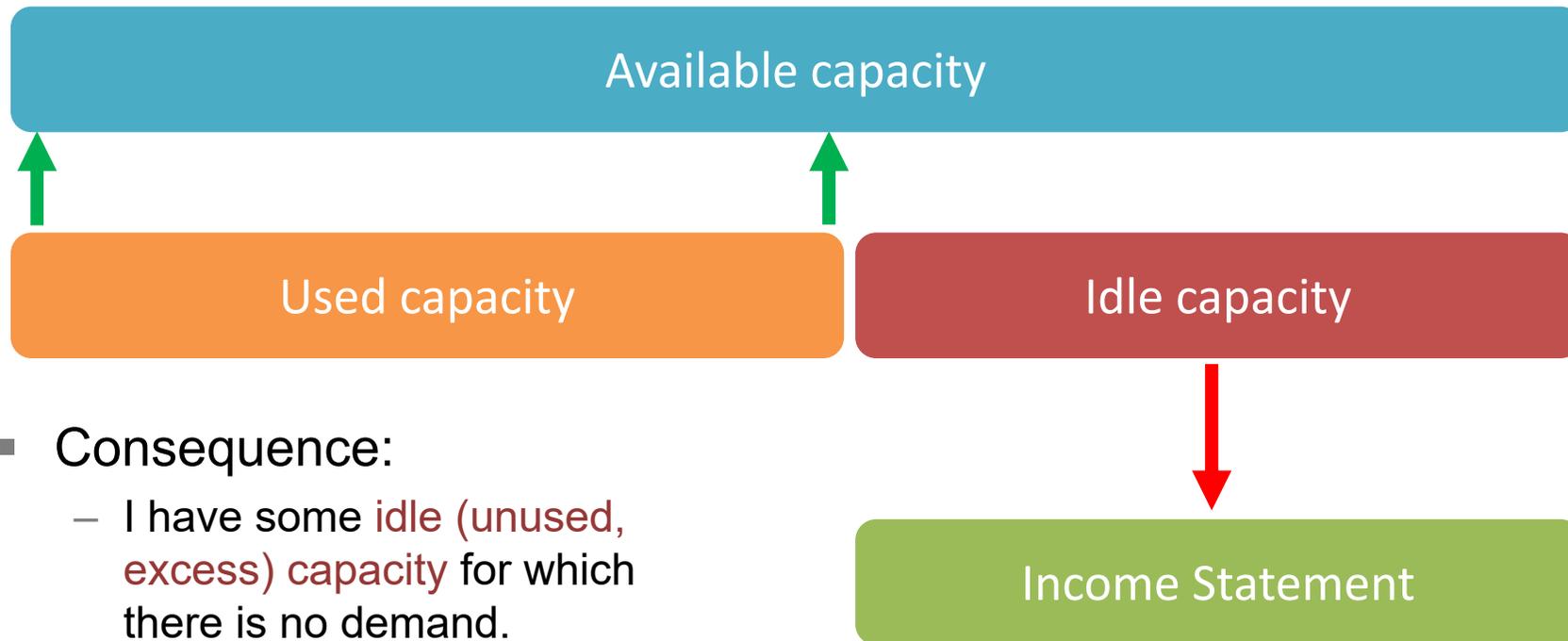
- **Supply-driven mindset:**
 - I have the capacity, therefore I need to find somebody (else!) to whom I can allocate its cost (i.e. whom I can make pay for it).
- **Accounting:**
 - Allocation rate depends on the expected output.
 - Allocated amount is independent of required/consumed input.
 - All overhead is allocated (and accountants are happy)

“Pull” Allocation



- **Demand-driven mindset:**
 - I have some product demand, therefore I need a certain capacity to produce them.
- **Accounting:**
 - Allocation rate depends on the possible output.
 - Allocated amounts depend on the required/consumed input.
 - Not all overhead is allocated to output (finished goods).

“Pull” Allocation



- Consequence:
 - I have some **idle (unused, excess) capacity** for which there is no demand.
- Accounting:
 - **No allocation** of idle capacity cost to output (finished goods).
 - Directly **expense** idle capacity cost in the Income Statement.

Comparison (1)

	“Push”	“Pull” (Capacity costing)
Allocation	Supply-driven	Demand-driven, need-based
Allocation rate: intensity of capacity usage	Interdependencies: amount allocated to A depends on B	Independencies: amount allocated to A is independent of B
Allocation rate: changes over time	May fluctuate (e.g. seasonality)	Is stable.
Cost object profitability	Depends on other cost objects.	Independent of other cost objects.

Comparison (2)

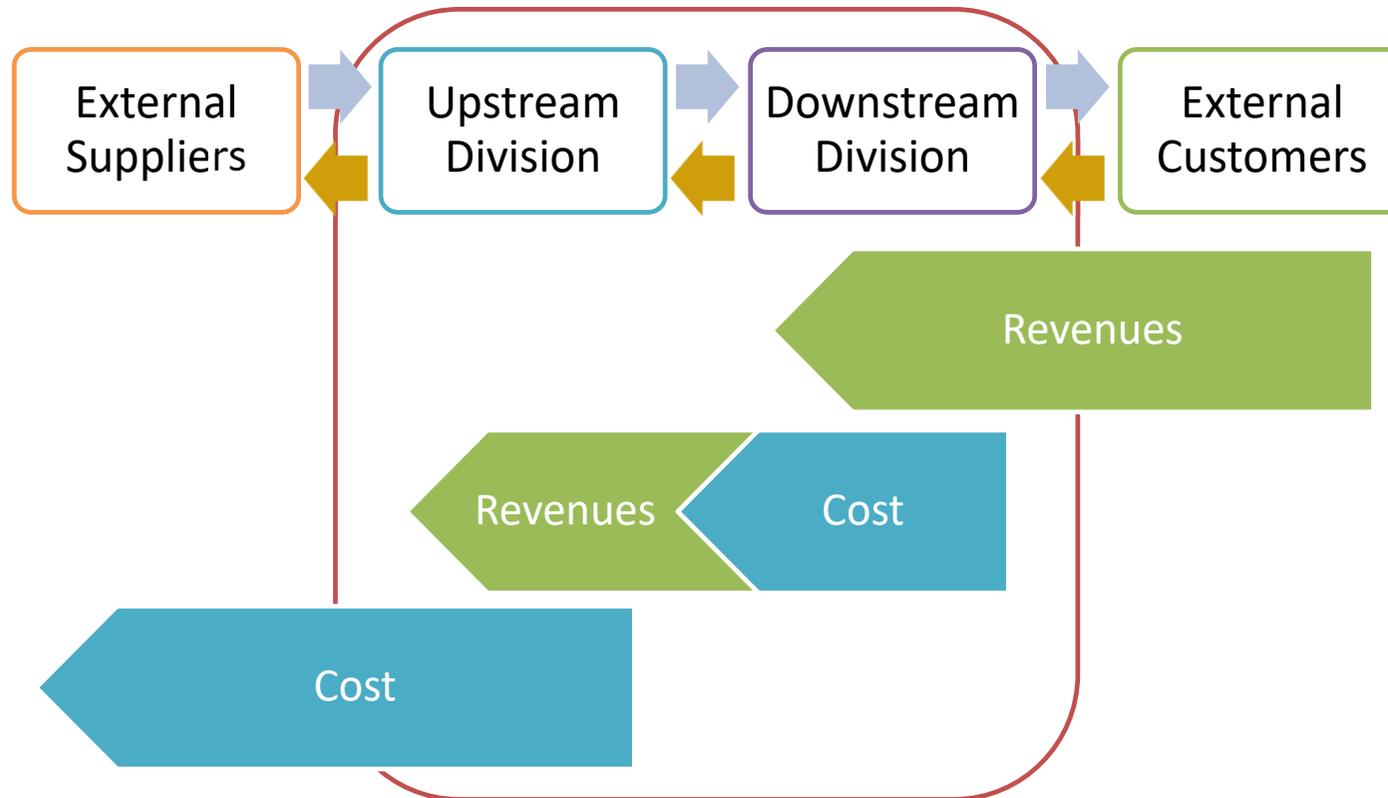
	“Push”	“Pull” (Capacity costing)
Cost of idle capacity	Hidden in product costs	Made explicit to force decisions
Discussion focus	Haggling over (re-)allocation	Management of resources
Contradictory signals (example)	High product cost = increase price on existing products	High idle capacity cost = find new products
Capacity management	Obstruction	Support

Sub-Micron: Agenda

1. Context & Objective
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3. Overhead Allocation: Bad & Best Practices
4. **Transfer Pricing**

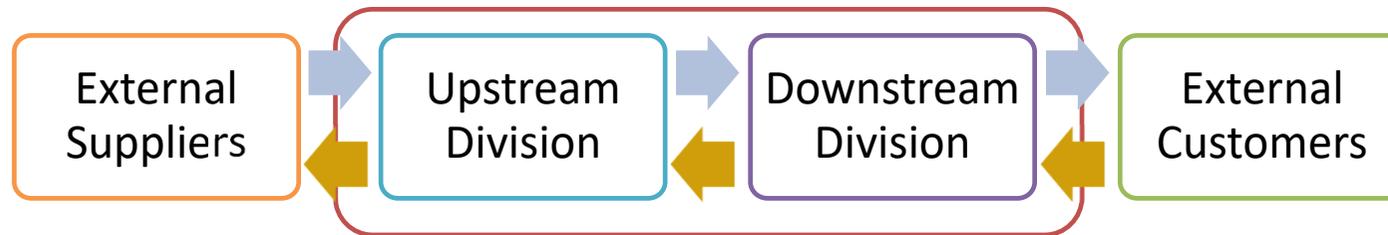
Transfer Price

- Measures the profit consequences of internal trade:



Transfer Price

- Measures the profit consequences of **internal trade**:



- Sharing-rule** of value creation:
 - Upstream (internal supplier): deserves (at least) reimbursement of incurred costs (alternative: sell externally).
 - Downstream (internal customer): should pay for received services & products (alternative: source externally).
- Profit shifting**: from one profit center of the company to another.

Transfer Price: Objective #1

- **Tax & tariff management** (not covered in this course):
 - Taxes: minimize taxable profit (= income tax) in high tax country, maximize taxable profit in low tax country.
 - Tariffs: minimize flow of physical goods with high import and/or export tariffs.

Transfer Price: Objective #1

Deloitte.

2016 Global Transfer Pricing
Country Guide



Planning for methods, documentation, penalties
and other issues

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39	Canada	181	New Zealand
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47	China	189	OECD
53	Colombia	193	Peru
57	Costa Rica	197	Philippines
61	Croatia	200	Poland
65	Czech Republic	205	Portugal
68	Denmark	209	Romania
72	Dominican Republic	214	Russia
75	Ecuador	218	Saudia Arabia
79	Egypt	221	Singapore
84	El Salvador	225	Slovakia
87	Estonia	228	Slovenia
91	Finland	232	South Africa
95	France	237	Spain
99	Germany	242	Sweden
103	Greece	245	Switzerland
108	Guatemala	249	Taiwan
112	Hong Kong	253	Thailand
115	Hungary	256	Turkey
119	Iceland	260	Ukraine
123	India	263	United Kingdom
127	Indonesia	268	United States
132	Ireland	271	Uruguay
135	Ireland	274	Venezuela
138	Italy	277	Vietnam
143	Japan	282	Contacts

- Up to date information:
[https://dits.deloitte.com/
#TransferPricingGuides](https://dits.deloitte.com/#TransferPricingGuides)

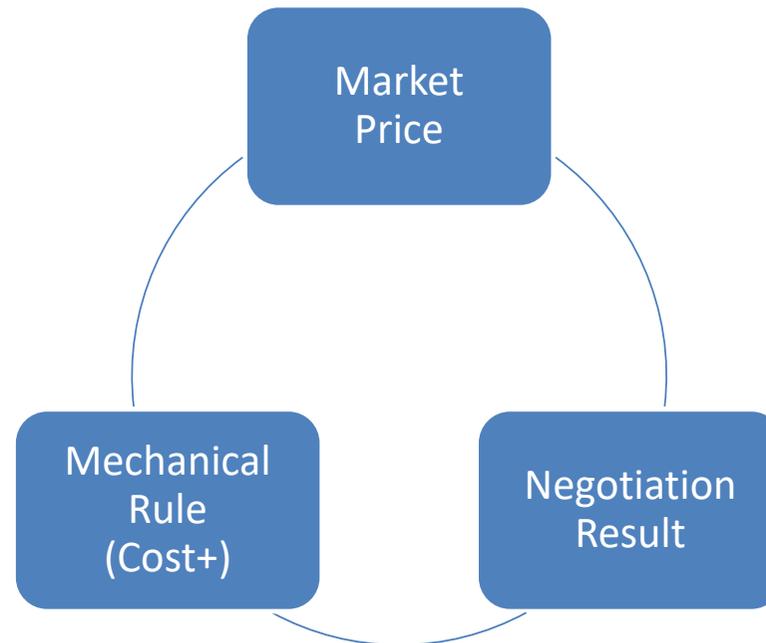
Transfer Price: Objective #2

- **Organizational performance management & value creation** (even without differences in taxes and/or tariffs).
- **Numbers:** divisional profit measurement.
 - Decision-making.
 - Performance evaluation.
 - Financial reporting (segment disclosure).
 - Tax & tariff optimization.
- **People:** incentive effects towards goal congruity.
 - Delegation: central vs. de-central decisions.
 - Effort: decision-making in best interest of division.
 - Information sharing: price “reveals” information.
 - Coordination: decision-making in best interest of firm.

Problem of
direct conflict:
internal supplier
↔
internal customer.

Challenges/Solutions?

Common Transfer Price Approaches



Transfer Price: Practice

Market Price

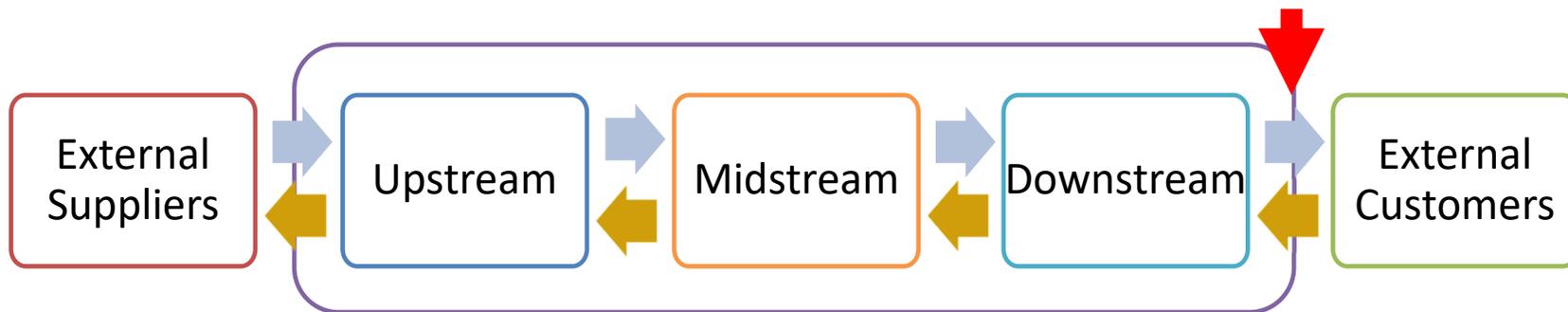
- Usual (textbook) approach:
 - Transfer price = market price of an intermediate product/service that can be and is traded internally.



Transfer Price: Practice

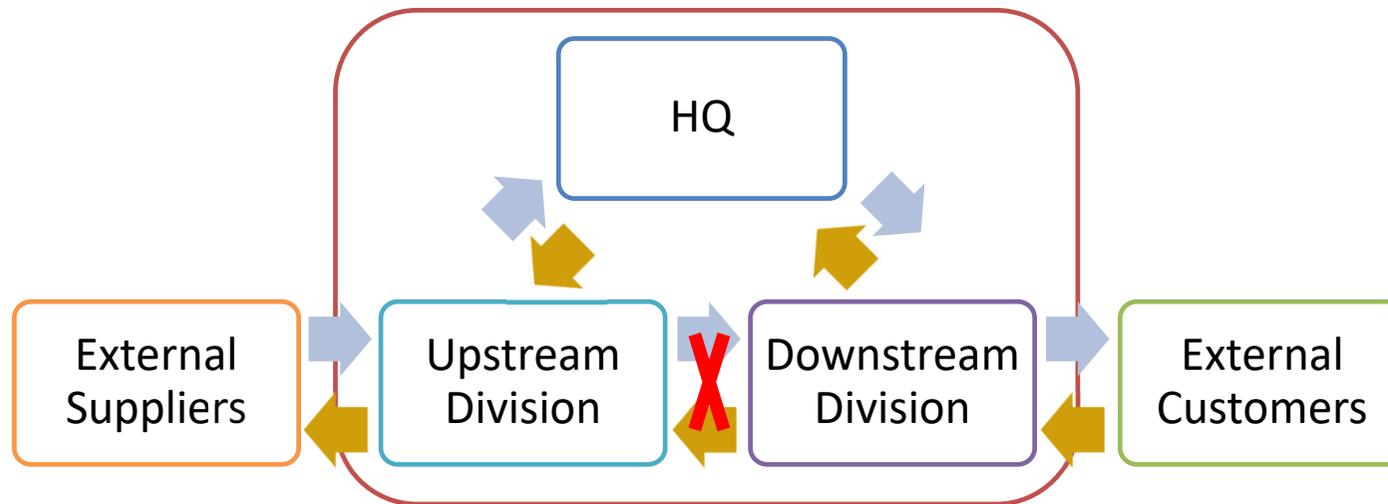
Market Price

- Modern approach (increasingly popular in practice):
 - Transfer price = market price of the final product/service less a “fair” profit margin for the downstream division (“resale-less method”).
 - Estimation of “fair” based on market benchmarks (comparable stand-alone firms).



Transfer Price

- Measures the profit consequences of **internal trade**:



- Decoupling** of upstream and downstream.
- Centralization** of transfer pricing.

Capacity Strategy

Mercedes deckelt Produktionskapazitäten in Deutschland

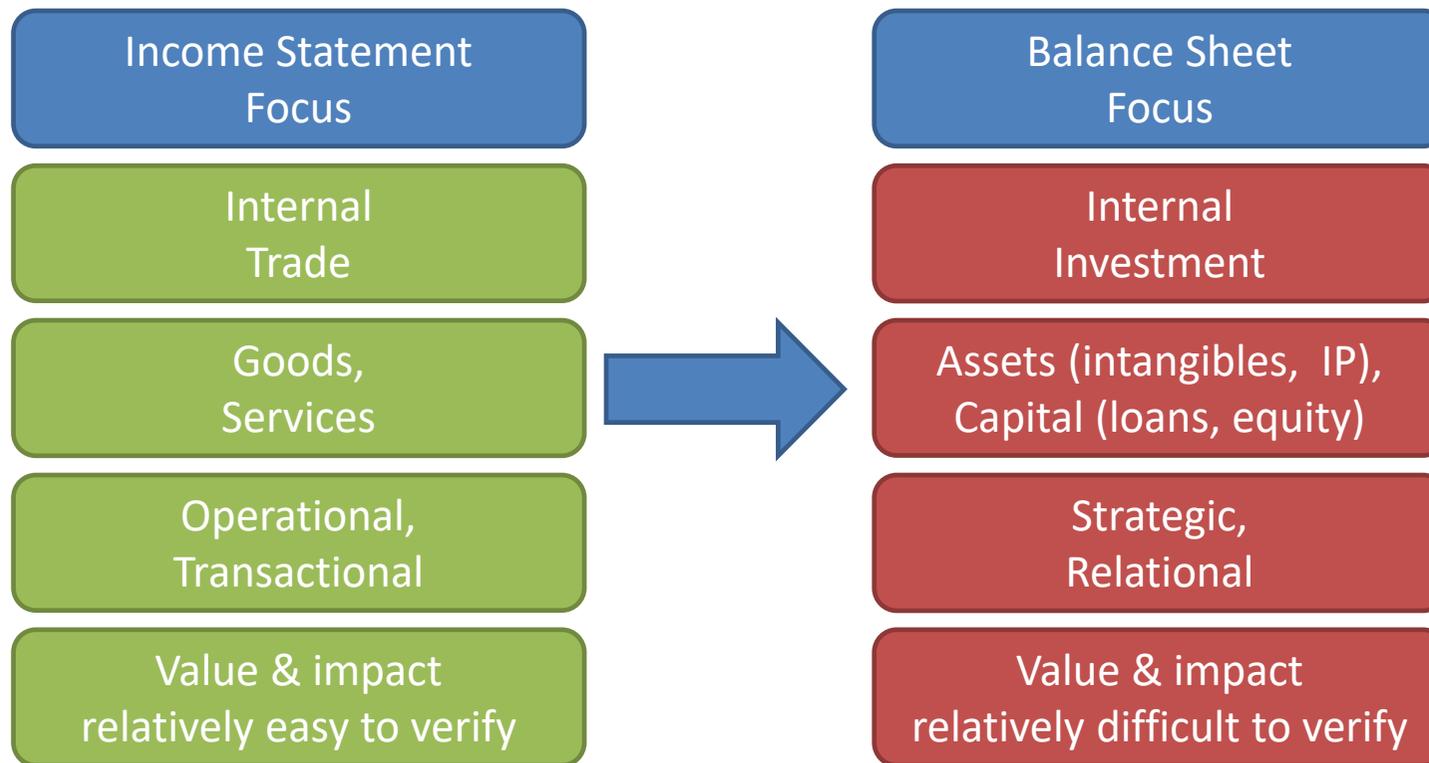
Von Benjamin Wagener, Sindelfingen 20.02.2025, 08:11 Lesezeit: 4 Min.



<https://www.faz.net/aktuell/wirtschaft/unternehmen/mercedes-setzt-verstaerkt-auf-werke-in-laendern-mit-niedrigeren-kosten-110308173.html>, accessed February 20 2025

Mit einem Umbau der Produktion intensiviert der Autohersteller sein Sparprogramm. Künftig setzt das Unternehmen verstärkt auf Werke in Ländern mit niedrigeren Kosten.

Transfer Price: Trends



Surprise? Internal Software Licences

VORWURF

Blackrock nutzt Lücken im Steuersystem aus

20.06.2025, 21:55 Lesezeit: 2 Min.



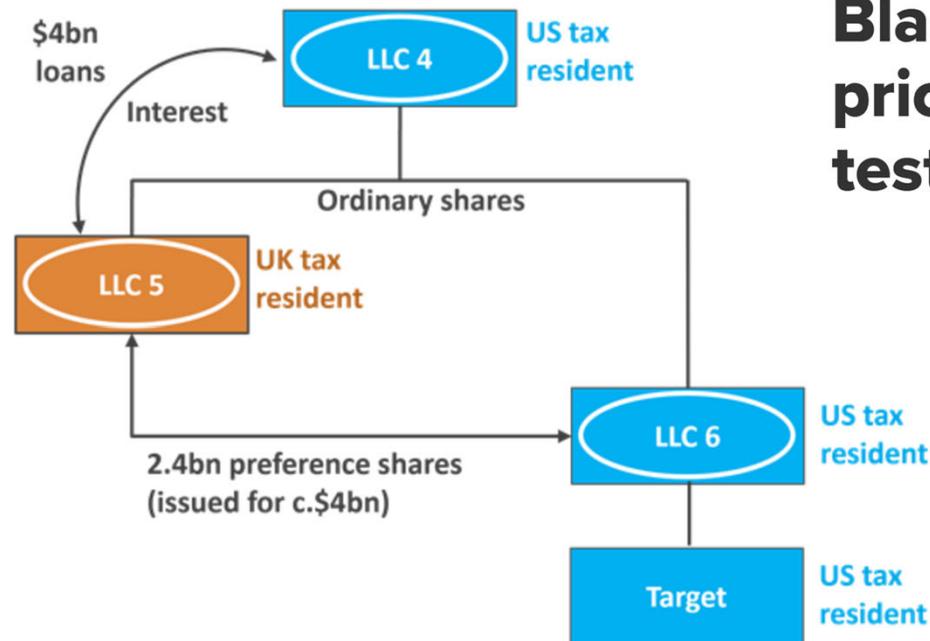
Die Lizenzgebühren für eine interne Software mindern die steuerpflichtigen Gewinne. Auch der Bundeskanzler Friedrich Merz steht in der Kritik.

Die Investmentgesellschaft nutzt dem Bericht zufolge konzerninterne Transaktionen: So berechnen sie Tochtergesellschaften in Hochsteuerländern wie Deutschland hohe Lizenzgebühren für die Nutzung einer internen Software – und mindern so die steuerpflichtigen Gewinne. Gleichzeitig fließen die Gebühren als Einkünfte an Tochtergesellschaften in Ländern mit deutlich niedrigeren Steuern.

<https://www.faz.net/aktuell/wirtschaft/vorwurf-blackrock-nutzt-luecken-im-steuersystem-aus-110548539.html>, published June 20, 2025, accessed July 14, 2025

Read the full study in English at: <https://left.eu/app/uploads/2025/06/Inside-BlackRock-1.pdf>

Example: Balance Sheet Transfer Pricing



BlackRock ruling clarifies transfer pricing and unallowable purpose tests for intra-group financing



<https://www.bdo.co.uk/en-gb/insights/tax/corporate-international-tax/blackrock-ruling-clarifies-transfer-pricing-and-unallowable-purpose-tests-for-intra-group-financing>, published April 24, 2024, accessed July 14, 2025

Well, Do What You Sell 😊

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TAXES SHOULD BE SIMPLER

Tax Evaluator: monitor capital gain distribution estimates

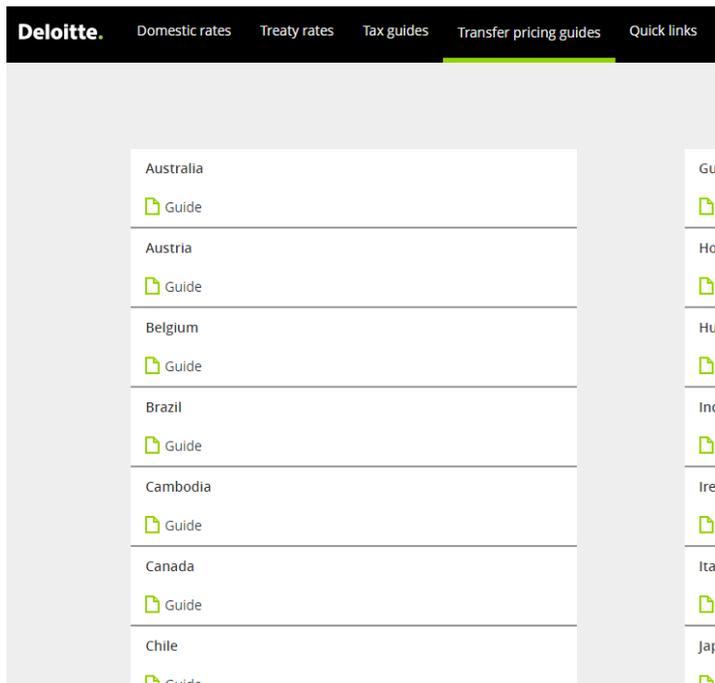
Taxes should be a part of every advisor's year-end process. BlackRock's Tax Evaluator makes it easy to monitor capital gain distribution estimates and identify tax loss harvesting opportunities.

[> Sign in to Tax Evaluator](#)

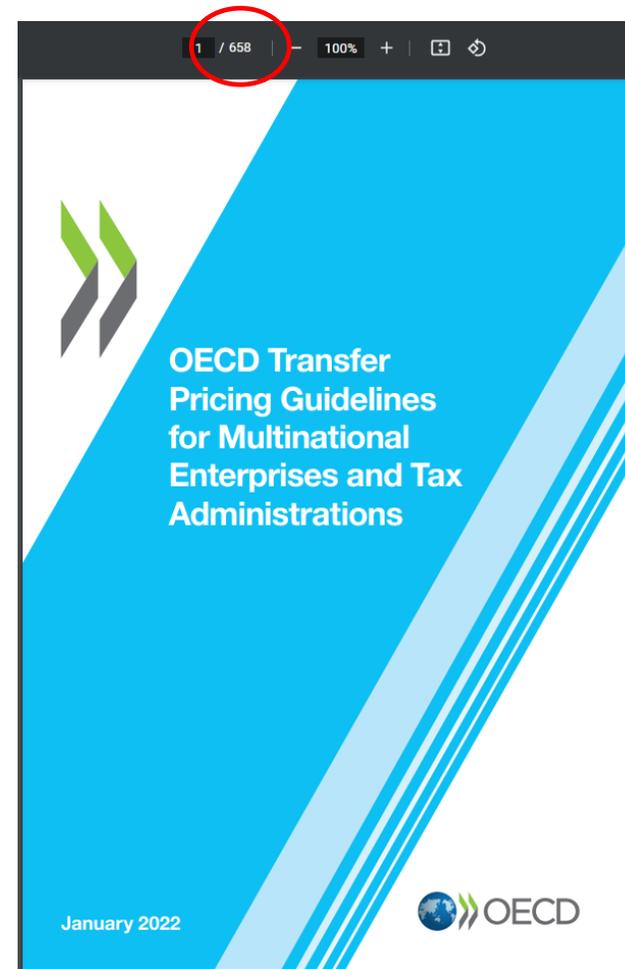


<https://www.blackrock.com/us/financial-professionals/tools/tax-evaluator>, accessed July 14, 2025

For the Bookworms

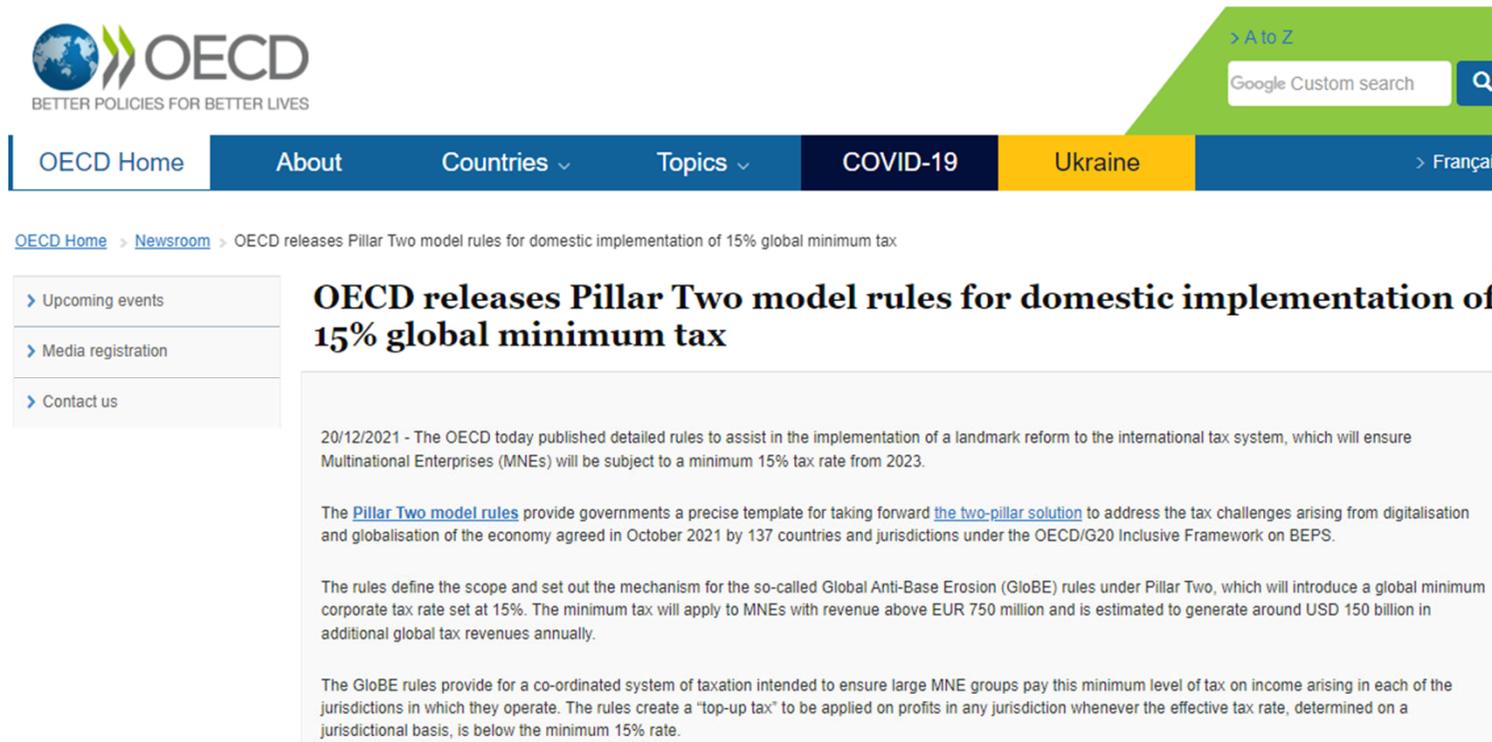


<https://dits.deloitte.com/#TransferPricingGuides>,
accessed October 24, 2022



<https://www.oecd.org/tax/transfer-pricing/>,
accessed October 24, 2022

Global Alignment (1)



The screenshot shows the OECD website's newsroom page. At the top left is the OECD logo with the tagline "BETTER POLICIES FOR BETTER LIVES". To the right is a search bar labeled "Google Custom search" and a navigation menu with items: "OECD Home", "About", "Countries", "Topics", "COVID-19", "Ukraine", and "Français". Below the navigation is a breadcrumb trail: "OECD Home > Newsroom > OECD releases Pillar Two model rules for domestic implementation of 15% global minimum tax". On the left side, there is a sidebar with links: "Upcoming events", "Media registration", and "Contact us". The main content area features the headline "OECD releases Pillar Two model rules for domestic implementation of 15% global minimum tax". The text below the headline states: "20/12/2021 - The OECD today published detailed rules to assist in the implementation of a landmark reform to the international tax system, which will ensure Multinational Enterprises (MNEs) will be subject to a minimum 15% tax rate from 2023." It further explains that the "Pillar Two model rules" provide a template for the "two-pillar solution" to address tax challenges from digitalisation and globalisation. The rules define the scope for Global Anti-Base Erosion (GloBE) rules, introducing a 15% global minimum corporate tax rate for MNEs with revenue above EUR 750 million, estimated to generate USD 150 billion in additional revenue annually. Finally, it notes that the GloBE rules create a "top-up tax" to ensure large MNE groups pay a minimum 15% tax rate on income in each jurisdiction where they operate.

<https://www.oecd.org/newsroom/oecd-releases-pillar-two-model-rules-for-domestic-implementation-of-15-percent-global-minimum-tax.htm>, published December 20, 2021, accessed May 24, 2023

Global Alignment (2)



Global corporate tax reform is on the way

Under the auspices of the OECD, 138 countries have reached an agreement on a fair allocation of taxing rights and a global minimum effective tax rate of 15%. This is a genuine revolution in international tax law. The global minimum tax rate will now be implemented in national law.

<https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Taxation/Articles/global-corporate-tax.html>, published April 6, 2023, accessed July 27, 2023

Expected Effect (1)

Opinion Lex

+ Add to myFT

Global minimum tax will put the squeeze on investors' returns

The new regime has been cleverly designed to limit tax avoidance

New [international tax rules](#) will restrict the scope to profit from arbitrage and curb a race to the bottom in corporate tax rates. That will remove an important driver of shareholders' returns. Declining tax rates accounted for a hefty 22 per cent of the profit growth of S&P 500 non-financial groups in the three decades to 2019, a study by the Federal Reserve's Michael Smolyansky [has shown](#).

Once fully bedded in, the new 15 per cent minimum tax is expected to force multinationals to pay between 6.5 per cent and 8.1 per cent more tax, according to the OECD.

The impact will be felt most acutely by companies that use tax havens, euphemistically known as investment hubs. These places, where foreign direct investment exceeds 150 per cent of gross domestic product, include Singapore, Switzerland, the Netherlands, Luxembourg and Ireland. They account for nearly a fifth of the profits earned by multinationals — though significantly less of their revenues, assets or employees.

<https://www.ft.com/content/53d7140a-88e4-4c70-8a55-1649d3d629c3>,
published January 12, 2024, accessed January 12, 2024

Creative Arrangements (1)

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REQUEST A DEMO



Blog

New research from Moody's Analytics reveals far-reaching risk of shell companies

Jan 22, 2024

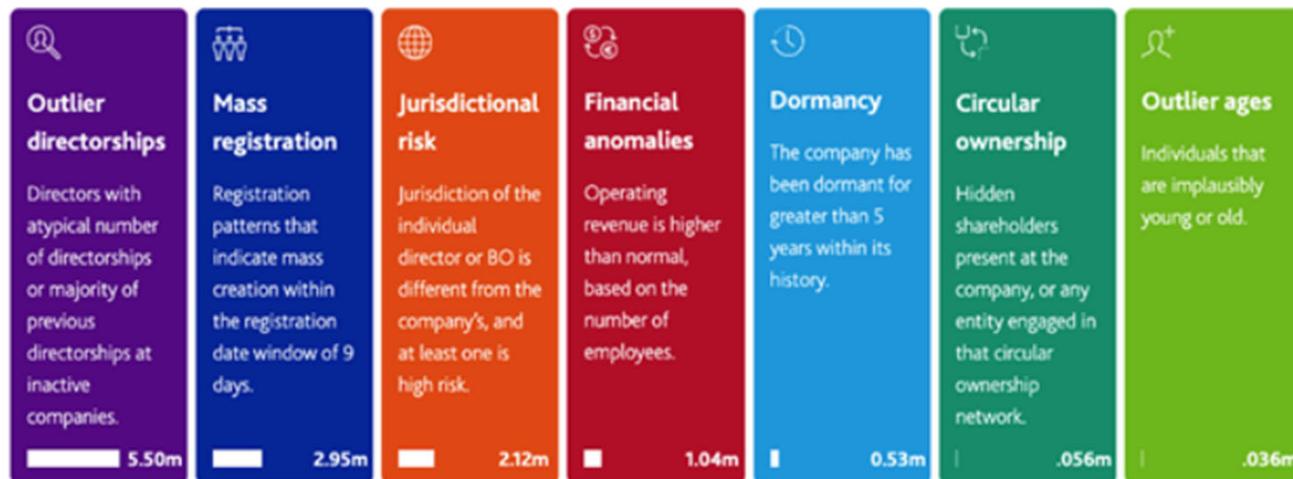
Multiple businesses being registered at the same address is often an indicator of risk. In one instance, the Shell Company Indicator identified over 22,000 companies with a registered address for the "Pyramids" in Egypt for example. Among 'atypical directorships', we found thousands of examples of directors below the age of 5, and 30,000 over the age of 100. One listed director — at 942 years old — would have been born in the 11th century.

<https://www.moody's.com/web/en/us/kyc/resources/insights/new-research-moodys-analytics-reveals-far-reaching-risk-shell-companies.html>, published January 22, 2024, accessed February 6, 2024

Creative Arrangements (2)



Shell company flags



(1) Numbers refer to the total number of companies within the Moody's dataset that have or display this outlier or anomalous characteristic.

<https://www.moody's.com/web/en/us/kyc/resources/insights/new-research-moody's-analytics-reveals-far-reaching-risk-shell-companies.html>, published January 22, 2024, accessed February 6, 2024

Local Tax Havens

Schatten auf dem Steuerparadies mit Rheinblick

Von Nadine Bös 21.06.2024, 12:07 Lesezeit: 4 Min.



Monheim am Rhein ist bekannt für geringe Gewerbesteuern und selbstfahrende Busse. Nun macht die Stadt neue Schlagzeilen – mit Verfahren gegen mutmaßliche Briefkastenfirmen.

<https://www.faz.net/aktuell/wirtschaft/unternehmen/monheim-am-rhein-innerdeutsches-steuerparadies-mit-rheinblick-19797833.html>,
published June 21, 2024,
accessed June 21, 2024

Transfer Pricing!



COMPANIES / GUEST POSTS

Guest Post: Carbon Trading and Transfer Pricing – the Next Frontier for Multinational Corporations



Mark Segal

January 5, 2023

<https://www.esgtoday.com/guest-post-carbon-trading-and-transfer-pricing-the-next-frontier-for-multinational-corporations/>, dated January 5, 2023, accessed January 9, 2023

Transfer Pricing

The benefits of intragroup transfers of carbon credits

MNCs may seek to minimize overall group carbon tax liability – or the need to purchase credits under an emissions trading system – by moving carbon credits among different related party entities. A key transfer pricing consideration would be how to price the carbon credits. The MNC would need to consider the price of the credit of a willing buyer and seller, which may be different in compliance and voluntary markets. In terms of pricing, the appropriate market price – such as spot prices at different dates and potentially forward price curves – would need to be evaluated to understand alternatives. It would also be important to consider whether aligning emissions and credits would benefit the MNC. For example, a benefit to its reputation that allows it to charge a premium price or boost sales.

<https://www.esgtoday.com/guest-post-carbon-trading-and-transfer-pricing-the-next-frontier-for-multinational-corporations/>, dated January 5, 2023, accessed January 9, 2023

Carbon Price Avoidance & Response



ENVIRONMENT / GOVERNMENT

UK to Launch a Carbon Tax on Imports

The UK government announced that it will introduce a carbon border adjustment mechanism (CBAM) by 2027, establishing a carbon tax on imported goods targeted at a series of key emissions-intensive industries, aimed at equalizing the carbon price paid by UK producers with those outside the UK, and avoiding "carbon leakage," or shifting of production of carbon-intensive goods to jurisdictions with less stringent emissions reduction policies.

<https://www.esgtoday.com/uk-to-launch-a-carbon-tax-on-imports-by-2027/>, published December 19, 2023, accessed December 20, 2023

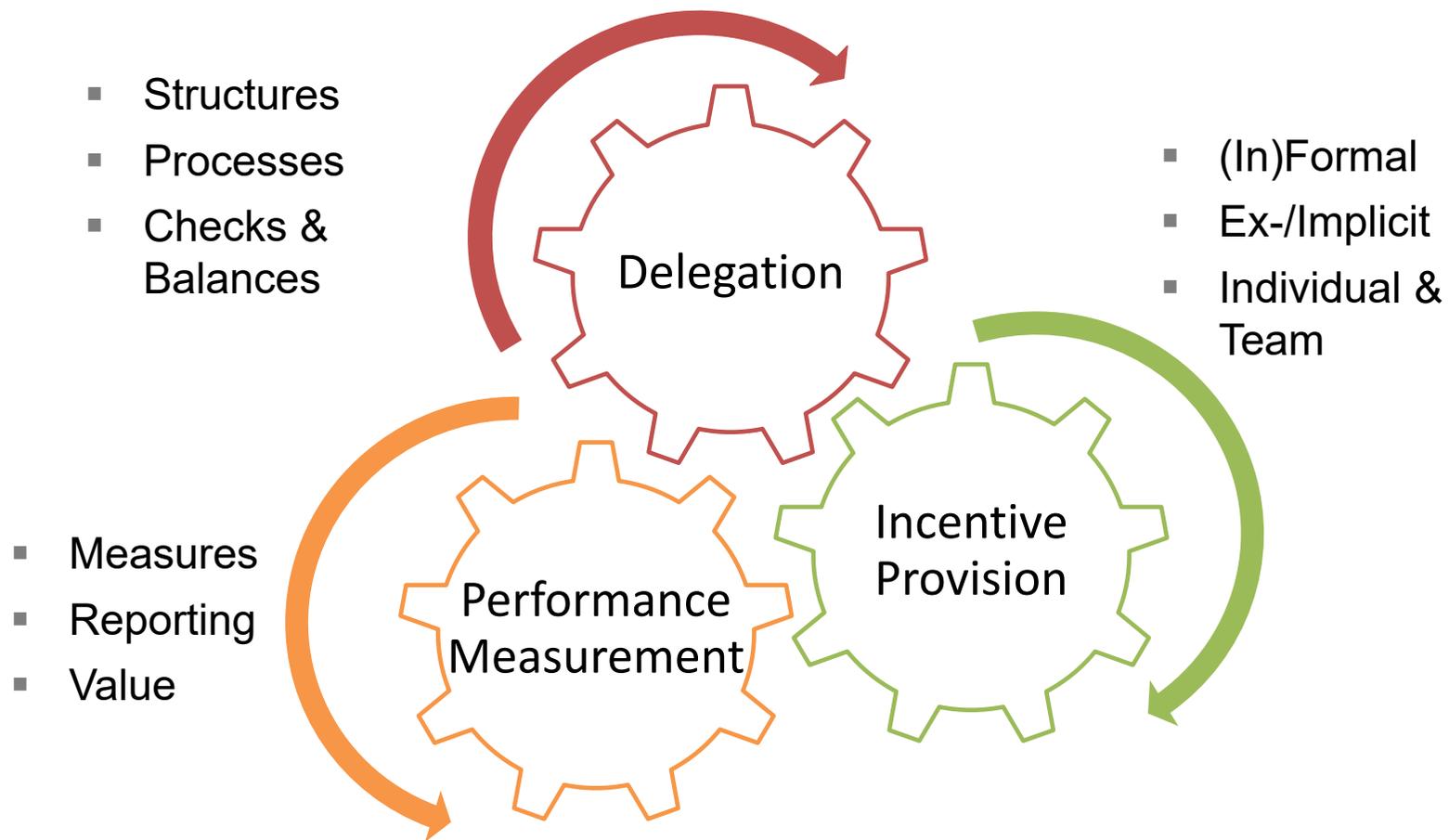
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Key Messages

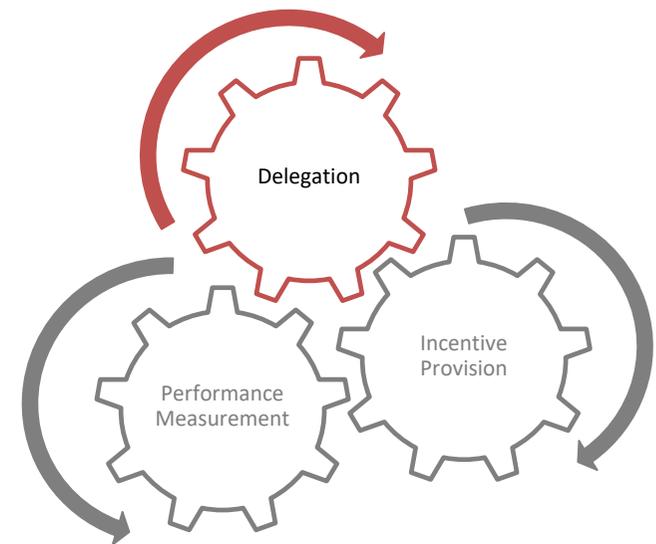
- **Transfer price:**
 - Organizational policy.
 - Objectives: numbers & people.
 - Calculation: cost, market, or negotiation.
 - Problem: direct conflict & sub-optimal decisions.
- **Accounting & Management:**
 - Decentralization & delegation: benefits & costs.
 - Organizational design & policies.
 - Corporate culture & leadership.
 - **Consistency of accounting & reporting with corporate strategy, business model, and organization.**

Organizational Governance



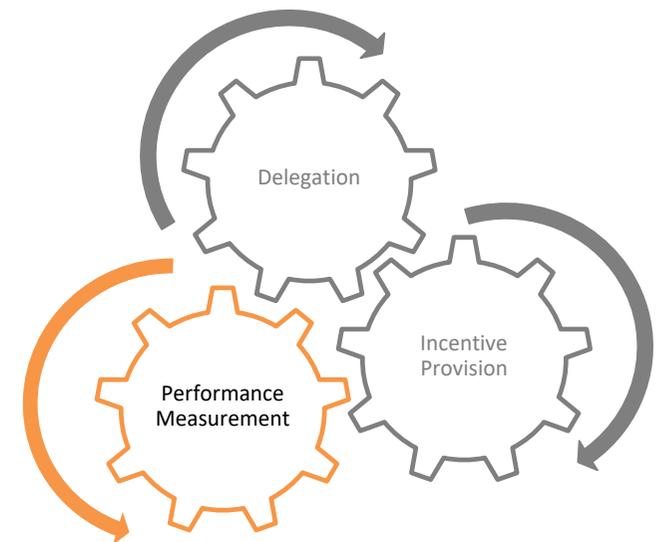
Roles of Transfer Price

- Delegation:
 - ⇒ type of decisions.
 - Sales vs. production.
 - Return vs. risk management.



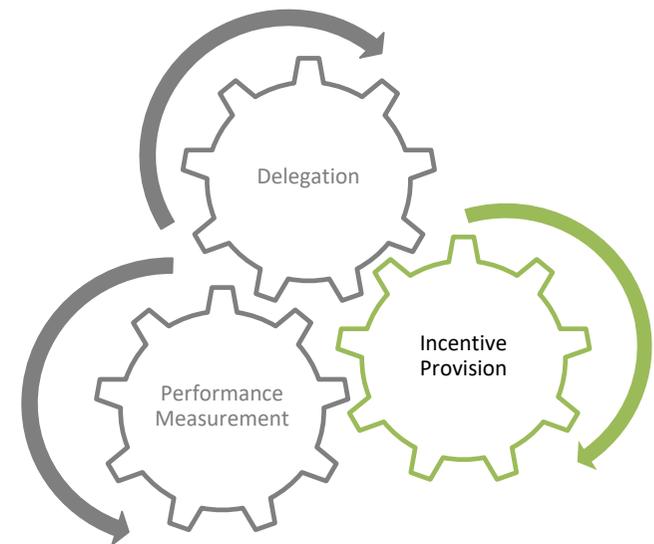
Roles of Transfer Price

- Performance measurement:
 - ⇒ **profit margins of business units.**
 - “(My) left pocket – (your) right pocket”.
 - “Share the cake.”



Roles of Transfer Price

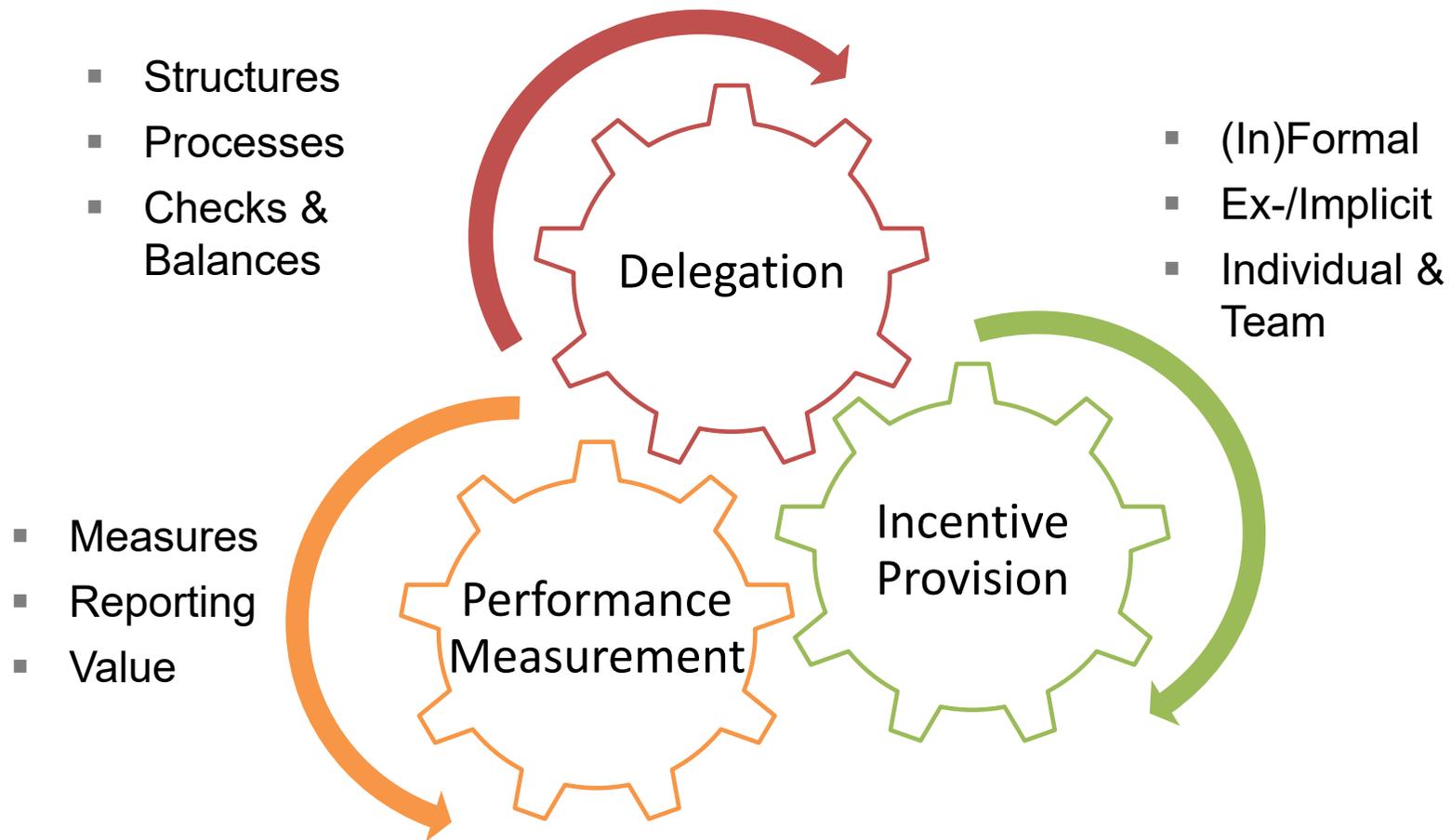
- Incentive provision:
 - ⇒ guides attention, decisions, actions.
 - Goal-congruent decisions.
 - “Grow the cake.”



Sub-Micron: Agenda

1. Context & Objective
2. Sub-Micron Devices
3. Overhead Allocation: Bad & Best Practices
4. Transfer Pricing
5. Summary
6. Outlook

Organizational Governance



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