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Lecture Five: Theory of Harm, Norms, Values and Trust



## Order of presentation

- 1. Announcement
- ✓ Continuous Assessment Test
  - 2. Recap
- 3. Theory of Harm, Norms, Values and Trust



## Journey to Mission MarsInsEcon2023

- Flight is MarsInsEcon-2023
- Vessel id is Mars-Ins-Econ-2023
- Currently in the 5<sup>th</sup> week of our flight

Theory of Harm,
Two-Sided
Markets and
Big Data



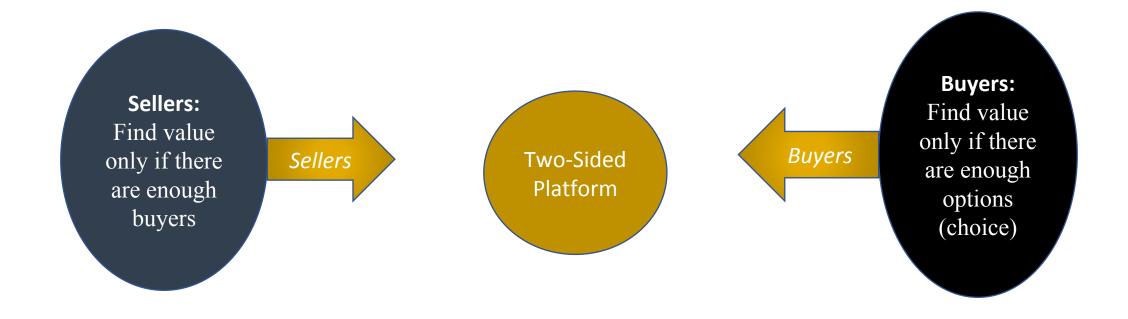
## Introductio n

- ❖ Theory of harm: An in-depth explanation of why an agreement between two or more companies or a firm's practice may cause competitive harm and severely affect the consumers, considering the structural features of the market, incentives, and ability of the involved firms
- Generally, explains why specific conduct breaches the competition laws with appropriate legal tests explaining why this conduct causes harm to competition and why it should be avoided

## Introductio n

- ❖ Two-sided market: A common meeting place where a pair of agents can interact through an intermediary
- ❖ A two-sided marketplace is a business model that allows for direct interaction between customers and suppliers and creates value through an intermediary platform
- ❖ For instance, a play station; clients will buy based on the availability of games while software developers will write games as per the market's demand. In this case, there exist two distinct groups of participants, both of which must deliver value to ensure the system works. Besides, there is a cross-side ex-change benefit, a situation in which if/when users increase on a specific side of the market, there will be an equal effect on the other side. This results in an unfair trade when suppliers create entry barriers or use unfair business practices that inhibit fair completion

## A TWO-SIDED MARKET





## Introductio n

- Pricing to one side of the market is directly dependent on the costs and demand that the consumers bring and their participation effects on both sides and profit extraction for these participations
- ❖ Pricing decisions in two-sided markets include elasticity of response on one side and make-up charged on the other side, which significantly implicates prices. The price anomalies in two-sided markets create hostile prices and low marginal costs
- ❖ Price discrimination is expected in this market, especially in situations of demand heterogeneity, which increases value extracted on one side while lowering prices on the other valuable side
- Openness is the strategic plan in two-sided markets that evaluates how many businesses to pursue and how to approach its competition. It makes two-sidedness to be an endogenous choice

## Introductio n

- Two-sided markets are complex when paired with big data
- An example is how Google uses search data to provide Google maps at higher quality and zero cost, displacing the conventional map producers
- ❖ The zero cost is a maximization of profits without intentions of predating according to a two-sided market. Therefore, it presents no harm, just allocative inefficiency, while still creating harm through dynamic inefficiency. But assessing this kind of harm requires an assessment of the possible future innovations

# Big Data in Two-Sided Markets

- Two-sided markets are usually characterized by stiff competition, which creates the need and value for Big Data. Increased competition promotes rapid growth of firms using Big Data as a means of deterring competition
- Big Data is usually characterized by containing voluminous, velocity, and variety of information
- Most firms collect data on their own products, customers, suppliers, and competitors, and apply it for various business purposes, including the possibility of inhibiting fair competition

# Big Data in Two-Sided Markets

- Regarding harm theory, Big Data often creates barriers to entry, resulting in unfair market power, especially when they hold unique data that competitors cannot easily replicate
- Such companies can apply Big Data for various advantages, market analysis and consumer psychology, causing harm in the market. To ensure fair competition, companies are usually required to share non-personal machine-generated data with any interested third party, including competitors
- ❖ In a two-sided market, the sellers strive to gain complete knowledge of the other market participants, especially customers. Consumer psychology helps predict buying trends and public demand, while data on competitors help establish appropriate competitive strategies to keep the business afloat

## Theory of Harm in Big Data Mergers/Acquisitions in Two Sided Markets

- Over the years, big data relating to theories of harm have been formulated into merger control
- While big data can lead to pro-competitive effects and elevate economic efficiencies, it can also facilitate collusion, market power, and antitrust conducts that are detrimental to economics and the market condition
- ❖ Big data generally causes limited concerns due to its non-rivalrous and ubiquitous nature. However, it presents possible additional competition concerns. This is because the accumulation of enormous magnitude of data pile from many sources by the digital conglomerates creates vast advantages that result in unfair competition, leading to a relative foreclosure scenario

## Case Example: WhatsApp Acquisition by Facebook

- The case of Facebook/WhatsApp acquisition presented two theories of harm
- ❖ Facebook strengthened its position in the online advertising market using WhatsApp users' data to improve Facebook's target on advertising activities besides introducing advertising on the WhatsApp platform
- However, the EU found no barriers to entry, and competitors could collect data alongside Facebook
- If Facebook/WhatsApp merger is allowed to foreclosure, it will prevent competitors from thriving in the market, shrinking their customer base

## Case Example: WhatsApp Acquisition by Facebook

- ❖ Foreclosure competition is a big data theory of harm surrounding two-sided markets
- It allows dominant companies to access significant data sources to exclude competition by restricting access to such datasets. When specific data is inaccessible to other market players, with no alternative products and technical, economic, and legal challenges make it almost impossible to compete in the downstream market
- Removing potential foreclosure by fair licensing of data and implementing non-discriminatory terms, this theory of harm can be addressed

## Kenya's telecoms regulator approves Airtel, Telkom merger

FRIDAY DECEMBER 13 2019





Telkom Kenya CEO Mugo Kibati (left) and Airtel Kenya CEO Prasanta Das Sarma before the Senate Committee on Information and Communication Technology on October 22. FILE PHOTO | NMG

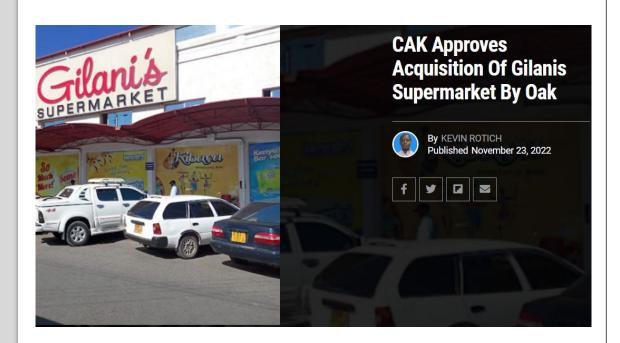
#### Summary

- Competition watchdog sets out a raft of conditions including retaining some staff.
- The merged company will be required to honour all existing government contracts.
- . The merged entity will not be allowed to sell or

#### By LYNETTE MUKAMI

More by this Author

Kenya's competition authority has approved the planned merger of Airtel Kenya and Telkom

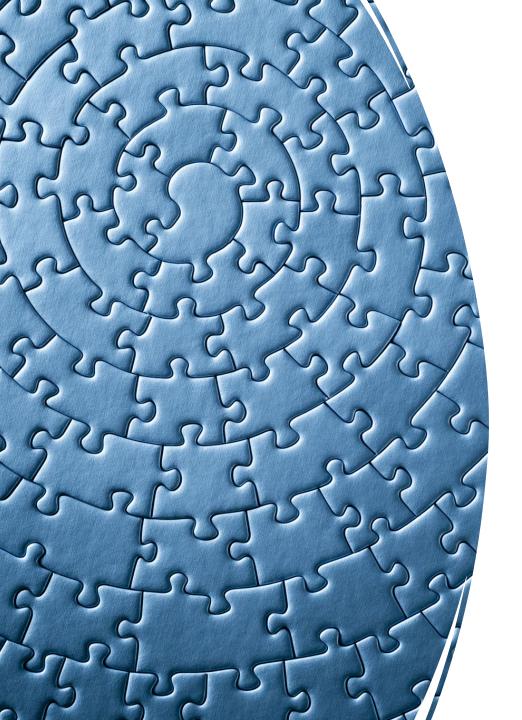


## Online Food Delivery Companies Under Probe By Competition Authority









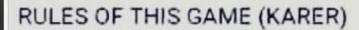
## **NORMS**

#### Introduction

- A norm concerning a specific action is said to exist when the right to control the action is held not by the actor, but by others
- In other words, there is a consensus in the social system that the right of control over an action is held by others
- Others have authority over the action, which authority is created through a social consensus

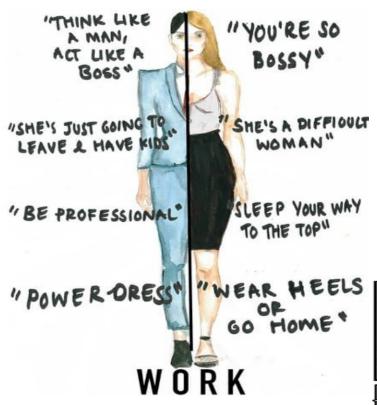
#### Introduction

- A norm is the property of a social system, not an actor within it
- A norm exists at the meso and macro levels, but governs the behavior of individuals at the micro level
- It is a convenient concept for explaining individual behavior taking the social context as a given
- Not a legally defined right or a right based on formal rules
- Rather, it is an informal, socially defined right
- Norms are best understood as part of normative theory. This is because while rational choice theory takes individual interests as given and then accounts for the functioning of the social system, normative theory takes norms as given and attempts to account for individual behavior



- 1.Owner of a ball chooses players
- 2.Playing until they get tired
- 3.A player with shoes have to remove it
- 4. Add more rules 😄 😜 😜





Consider, for example, transactions involving pork or alcohol in a Muslim society governed by the external institutions of a colonial power. Although legally possible, such transactions are likely to be frowned upon by one's fellow Muslims.







## Internalized Norms

- A norm may eventually become internal to an actor with sanctions applied by the actor on his/her own actions. In this case, the norm is said to have been internalized
- ❖ When that happens, the actor feels an internally generated reward for performing actions that are proper according to an internalized norm, or feels internally generated punishment for performing acts that are improper according to an internalized norm

# When Does a Norm Arise?

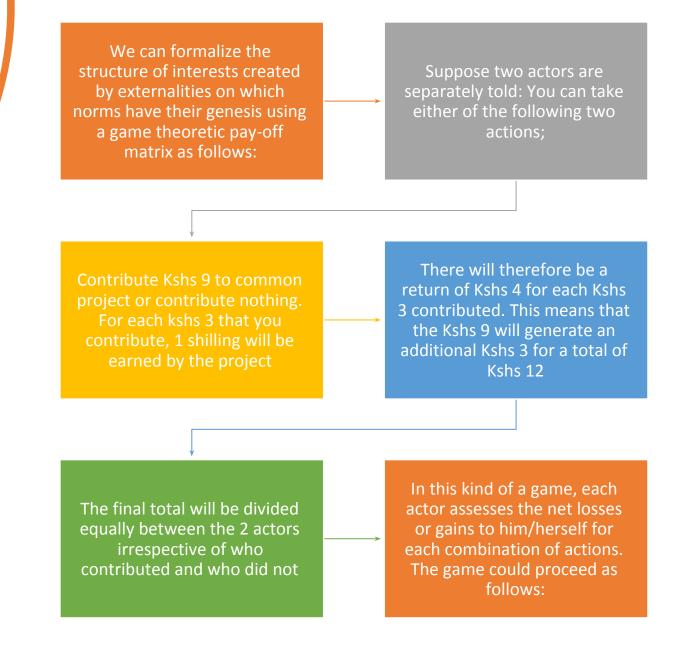
- A norm is a system level property that influences actions of individuals. It begins with individual acceptance of the consensus that his/her actions will be controlled by others
- This acceptance is either willingly or under the duress of sanctions

- We can distinguish between events that have consequences only for those who control them and events that have consequences external to actors who have no control over the events
- The later actions are said to generate externalities, and are therefore of interest to actors other than those who control them
- There are two types of externalities:
- When an action is beneficial to others other than the actor himself, we say that the actions generate positive externalities
- When an action is detrimental to others than the actor himself, we say that the action generated negative externalities





- An action that generates externalities generates interest in the action among those affected by the action
- For actions with positive externalities, there is always inadequate quantities of the action so that the problem is how to increase the action enroot to the equilibrium
- For actions that have negative externalities, there is always over production of an activity, so that the problem is how to reduce the action in the pursuit of equilibrium
- The potential beneficiaries of a norm are those affected in the same direction by an actor. Those affected by an action will tend to claim a right to control the action, and exercise this claim by imposing a sanction against the actor
- In so doing, they will impose an action that favours them at the expense of the other actor
- A conflict arises when an action has positive externalities for one group and negative externalities for another group



- ❖ Suppose A contributes but B doesn't. The total project value will be Kshs. (9 +3) = 12. When this is divided by 2, both A and B get Kshs 6 from the project. However, the net project outcomes are significantly different, in the sense that whereas B has a net of Kshs 6, A has a net of Kshs (6-9) = -3. Therefore A suffer a net loss amounting to Kshs 3. The mirror image of this happens if B contributes but A doesn't. In this case, B suffers a negative net of Kshs − 3
- ❖ If both A and B contribute, the computation of the project outcomes will be as follows:
- ightharpoonup Total project value will be Kshs [(9+3) + (9+3)] = 24.
- Collection by each party will be Kshs 24 devided by 2, which is Kshs 12.
- ightharpoonup The net outcome for each party is Kshs (12-9) = 3.
- Therefore, each party will have a positive net of Kshs 3

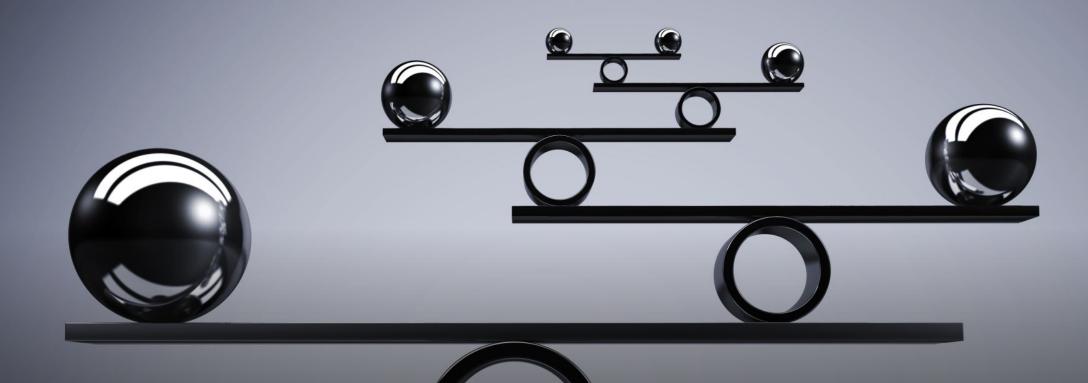
	В		
Α		Contribute	Not contribute
	Contribute	(3,3)	(-3, 6)
	Not contribute	(6, -3)	(0,0)

 Suppose none of the parties contributes. There will nothing to share and each party will end with a zero. The pay-off matrix for this project's game can be represented in the matrix above

#### ❖ Note that:

- 1. A's actions of either contributing or not contributing make a difference of Kshs 6 i.e. between -3 and 3 to B. Similarly, B's actions of either contributing or not contributing make a difference of Kshs 6 for A
- 2. A's actions impose externalities on B. Similarly, B's actions impose externalities on A
- 3. The external effects are greater than the direct effects of their own actions. For example, A's actions make only a difference of Kshs 3 to him/her. However, B actions make a difference of Kshs 6 for A. This analysis is also true of B
- 4. In both case, the externalities go in the direction opposite to the actors interests. Each actor is better off not contributing whatever the other actor does. But by not contributing, the actor makes the other worse off

- Outcome:
- ❖ Considering the structure of payoffs, each of these actors has an incentive not to contribute. However, if both don't, they get nothing and a joint benefit of kshs 0. If both do, the get Kshs 3 for a joint benefit of Kshs 6
- ❖ In other words, the optimal action by each actor produces an outcome which is not socially optimal. They would be jointly better-off if both took an action which is not individually optimal
- This outcome, popularly referred to as the Prisoners' dilemma in game theory, create the necessary incentive for both parties to be involved in establishing a norm that will constraint their individual behavior. This norm will cause actors to carry out an action which is better off for the other, such as contributing to the joint project
- It is the inter-dependence of outcomes that generate an interest in creating a norm



## **VALUES**



These are abstract ideas on what is good, desirable and right

#### Introduction



Part of our mental programming that arises from processes of socialization



It is part of the software of the mind

## Importance of values

- Values help resolve three issues
- 1. How an individual views him/herself in relation to the group/community with which he/she is associated
- Two option, which are mutually exclusive
- 1. Autonomy in which an emphasis is made on personal satisfaction, achievements, individualism, pleasure seeking and variety. Two types of autonomy: affective autonomy which relates to feelings and emotions; and intellectual autonomy which relates to ideas and thoughts that a cultural emphasis on the desirability of pursuing own ideas and intellectual interests independent of others
- 2. Embeddedness which keeps the interests of the group, which take priority, into mind

## Importance of values

- 2. How to encourage/guarantee socially acceptable behavior.
- Two options are available:
- 1. Use power distances and exploit hierarchical systems, emphasizing unequal distribution of power roles and resources. Use power distances to ascribe roles that ensure socially acceptable behavior
- 2. Egalitarianism, voluntary cooperation, recognize people as moral equals

## Importance of values

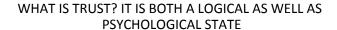
- 3. How to manage the interdependence between humankinds and the natural world
- Two options here
- 1. Mastery, or bending the natural world to human fancy, exploitation, treating the natural world as a means to an end, rather than seeing it as an end in itself
- 2. Harmony, are viewing the natural world as an end in itself, deserving protection



#### **TRUST**

#### Introduction







IT IS LOGICAL BECAUSE IN SITUATIONS THAT
REQUIRE OR CALL FOR TRUST, PEOPLE END UP
PERFORMING SOME MENTAL SOCIAL COST BENEFIT
ANALYSIS, OR ANALYSIS THAT INCLUDES
PROBABILITIES OF GAIN AND LOSS. THIS
CALCULATION LEADS TO SOME CONCLUSION ABOUT
WHEN A POTENTIAL TRANSACTEE IS LIKELY TO
BEHAVE PREDICTABLY



IT IS PSYCHOLOGICAL OR EMOTIONAL IN THE SENSE THAT PEOPLE IN SITUATIONS THAT CALL FOR TRUST CHOOSE TO EXPOSE THEIR VULNERABILITIES TO OTHERS BELIEVING THAT THOSE OTHERS WILL TAKE ADVANTAGE OF SUCH VULNERABILITIES



#### Introduction

- ❖ When do we trust? We trust when we make ourselves vulnerable but believing that others will not exploit our vulnerability. By trusting, people support cooperative behavour
- ❖ Trust is a resource that gets created through use. It is also a fragile resource which difficult and time intensive to create but can also be easily and quickly destroyed
- ❖ Trust affects contracting through two channels: 1) trust decreases demand for regulation over the courts that formally enforce a contract, and 2) trust directly influences contracting efficiency by substituting for costly formal regulation

#### **Trust Relations**

- Trust requires at least two parties, a trustor and a trustee. Each party is assumed to be purposeful: aiming at pursuing their interests
- Potential trustor's decision always problematic: he or she has to decide whether or to not to place trust on the potential trustee
- The trustee has also to choose between keeping the trust or breaking it. Often, what is being trusted is not the trustee's willingness or intention to keep the trust, but rather ability to do so
- A trustee may, in some cases, find it to his/her benefit to break the trust or gain in the short run but lose in the long run by never being trusted again by the trustor
- Pre-occupation with short run benefits could create incentives for the trustee to engage in actions designed to lead the potential trustor to place trust

#### ❖ Note that:

- 1. Placement of trust allows an action on the part of the trustee that would not have been otherwise possible. It places resources in the hands of parties who can use them to their benefit: benefit the trustee, the trustor or both
- 2. If the trustee is trustworthy, the party that places trust is better off than if the trust were never placed. If the trustee is not trustworthy, the trustor is worse off than before the trust were ever places
- 3. The act of placing trust involves the trustors voluntarily placing resources at the disposal of the trustee without any real commitment from the trustee
- 4. Trust actions have a time lag. For this reason, many devices have been created to reduce the need for placement of trust: example include (1). An escrow, by which a third party holds a first party's payment until a second part deliver on promises such as goods, (2) Bills of exchange by which a potential trustee offers a potential trustor a note from a third party who is more trusted than the potential trustee. (3) A contract involving a promise to pay or deliver. It is legally enforceable and acts as a collateral in the event of default

#### Trust Rule

- A potential trustor must decide between not placing trust, in which case there will be no change of utility, and placing trust, in which case the expected utility relative to current utility or the potential gain times the chance of gain minus potential loss time the likelihood of loss, would be greater
- A rational actor places trust if the first product is greater than the second one OR if the ratio of chance of gain to the chance of loss is greater than the ratio of the potential loss to the potential gain. In other words, let
- $\rho$ = chance of gain or probability that the trustee is trustworthy, which implies that  $1-\rho$  is the probability that the trustee is untrustworthy.
- $\clubsuit$  L= potential loss ie if the trustee is not trustworthy
- $\bullet$  G = potential gain ie if the trustee is trustworthy
- ❖ The decision rule can be summarized as:
- $\Rightarrow \text{ Place trust if } \frac{p}{1-p} > \frac{L}{6}$
- Remain indifferent if  $\frac{p}{1-p} = \frac{L}{G}$
- Do not place if  $\frac{p}{1-p} < \frac{p}{p}$

# What Creates the Need for Trust?

In the real world, there are people who are opportunistic in that they are ready to cheat, steal and renege on promises. Information is also often scanty and never perfect

These conditions create the need for trust, without which important transactions may never take place. If individuals do not expect others to fulfill their promises, they may not wish to enter in exchange or transaction with others

Trust generates out comes that can be represented by what has come to be referred as an Assurance Game, as indicated below:

#### A two-person Assurance Game

- Note: The pay-offs are structured to make cooperation a dominant strategy. Given the pay-off structure, each player maximizes pay-off through cooperation. It is more costly not to cooperate than to cooperate. It is therefore more privately profitable if the two parties cooperate
- The degree of trust can be gauged by the probability that the other party will cooperate
- Trust can be mediated by either other informal of formal institutions
- In highly individualistic societies such as those in the Western world, trust exists only when propped by formal institutions that also enforce sanction
- In more collectivist societies, trust can be generated by informal institutions

	Player 2		
P la		Cooperate	Don't Cooperate
y e r 1	Cooperate	(20,20)	(5, 15)
	Don't Cooperate	(15,5)	(10,10)

# Practical works on trust

- Active Depositors by Mikael Homanen (He shows that banks, that financed the highly controversial Dakota Access Pipeline, experienced significant decreases in deposit growth)
- 2. Fungáčová, Z., Kerola, E., & Weill, L. (Does experience of banking crises affect trust in banks?)
- 3. Koumpias, A. M., Leonardo, G., & Martinez-Vazquez, J (*Trust in Government Institutions and Tax Morale*)
- 4. Knack, S (Groups, growth and trust: Cross-country evidence on the Olson and Putnam hypotheses).
- 5. Cline, B. N., & Williamson, C. R (Trust, Regulation, and Contracting Institutions)
- 6. Wagner (Soft power and Germany's exports-First evidence from transaction data)

#### References

- Pollitt, M. (2002). The economics of trust, norms and networks. *Business Ethics: A European Review*, 11(2), 119-128.
- Fungáčová, Z., Kerola, E., & Weill, L. (2021). Does Experience of Banking Crises Affect Trust in Banks?. *Journal of Financial Services Research*, 1-30.
- Knack, S. (2003). Groups, growth and trust: Cross-country evidence on the Olson and Putnam hypotheses. *Public Choice*, 117(3-4), 341-355.
- Koumpias, A. M., Leonardo, G., & Martinez-Vazquez, J. (2020). Trust in Government Institutions and Tax Morale (No. paper2001). International Center for Public Policy, Andrew Young School of Policy Studies, Georgia State University.
- Homanen, M. (2018). Depositors disciplining banks: The impact of scandals. Chicago Booth Research Paper, (28).
- Cline, B. N., & Williamson, C. R. (2020). Trust, regulation, and contracting institutions. European Financial Management, 26(4), 859-895.
- Bromiley, P., & Harris, J. (2006). Trust, transaction cost economics, and mechanisms. Handbook of trust research, 124-143.
- \$ Lyon, F., Mšllering, G., & Saunders, M. N. (Eds.). (2015). Handbook of research methods on trust. Edward Elgar Publishing.
- ❖ Wagner, J. (2020). Soft power and Germany's exports-First evidence from transaction data. *Economics Bulletin*, 40(1), 624-631.

