

The Role of Regulation in 5G Market Design

The EECC and Its Impact on Investment in
Very High Capacity Networks
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What are the options?

What role of regulation in 5G market design?

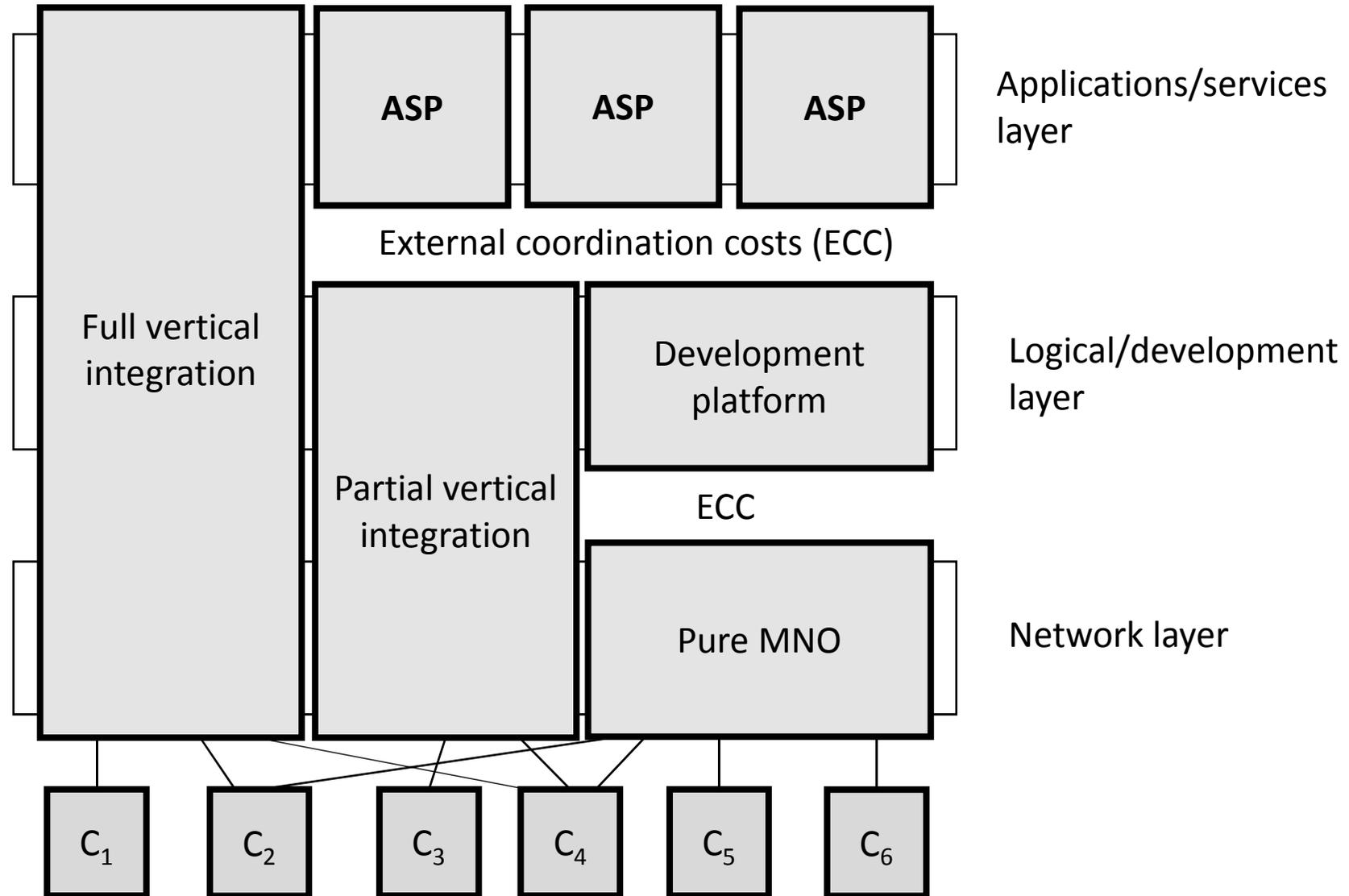
More questions than answers?



I saw the figures for 5G in gold
(with apologies to Charles Demuth)

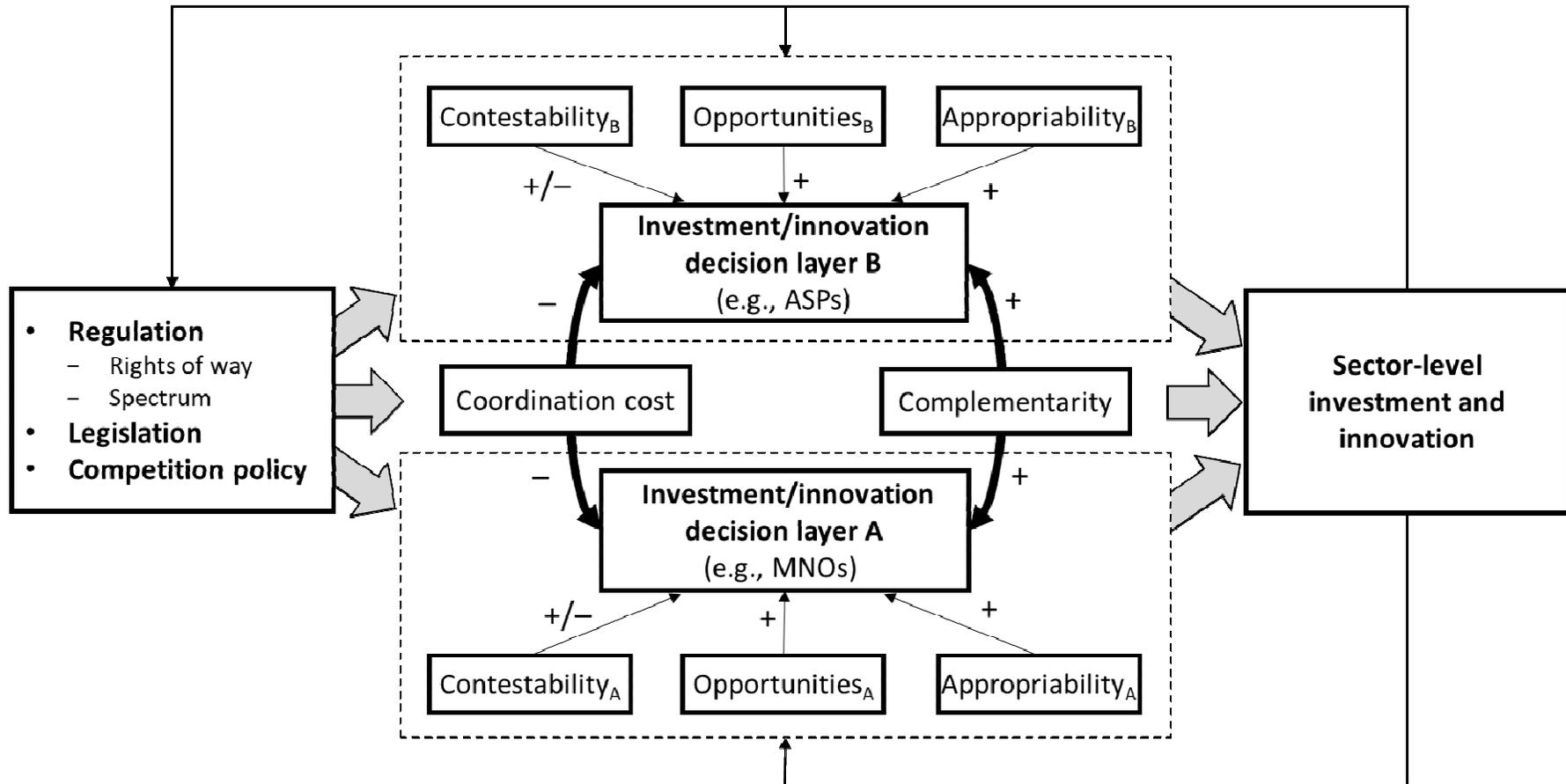
As "sampled" by Simon Forge

The 5G value system (stylized)



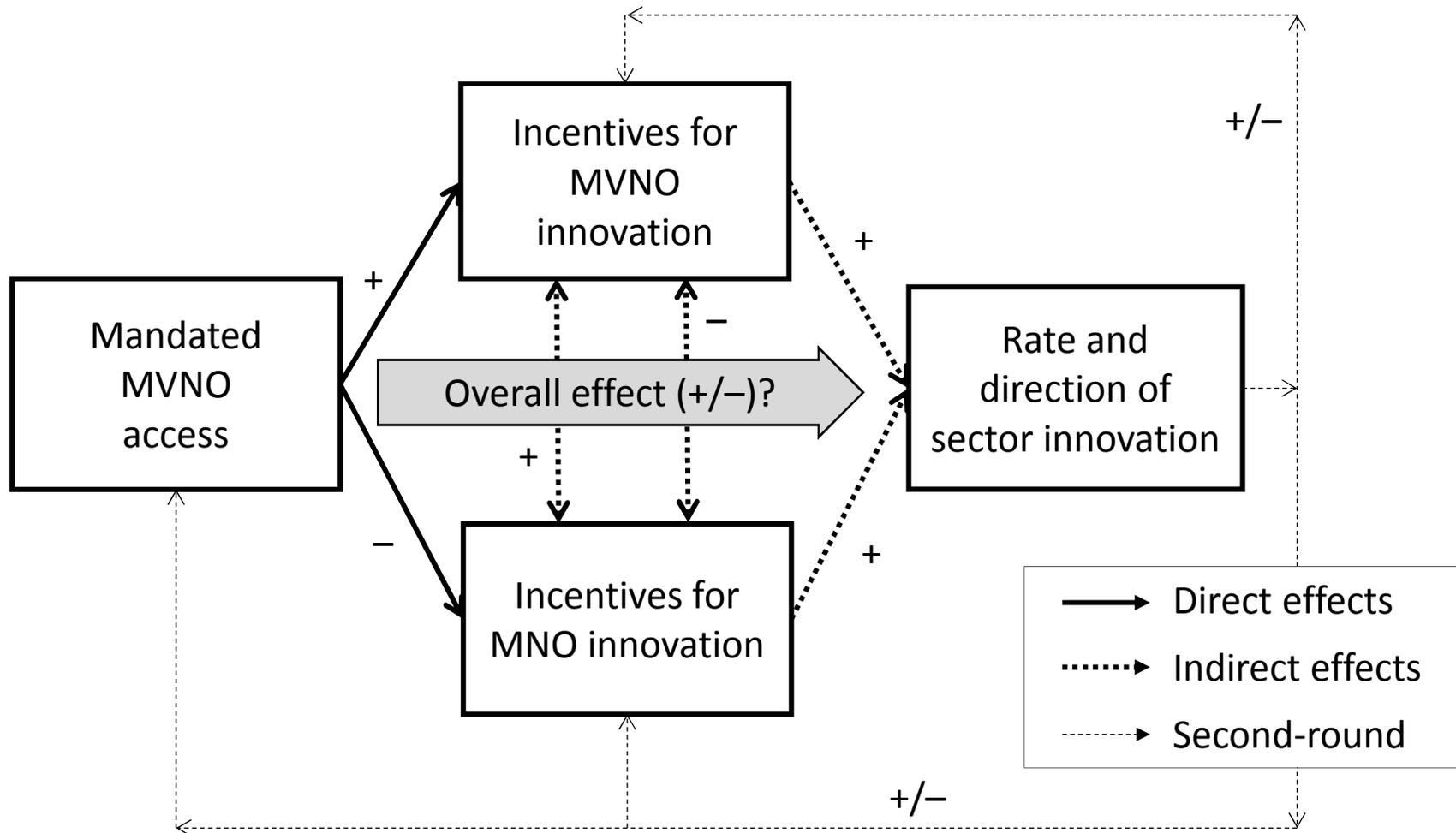
“Verticals” / “network slicing” being a third dimension

Innovation incentives and regulation



Should regulation be concerned with investments and innovation?

Example mandated MVNO access



Which are the overall effects?

Other market design dimensions

- Network neutrality and network slicing / verticals
- Unbundling and mobile back-haul
- Rights of way and competitive entry
- Market dominance and innovation drivers
- Licensing and assignment options – duration, entrant reservations, sharing, roll-out etc.

Policy implications

- A dynamic view of regulation for investment and innovation is needed for the converging future 5G infrastructure with its huge innovation potential.
- In the 5G system, it will be important to take direct and indirect effects and feedbacks into account. The overall effects of these counteracting, positive and negative, forces on 5G deployment and innovation are difficult to anticipate.
- Some network operators and players at higher layers of the value system will recognize complementarities and embed them in their business decisions but other players may seek to thwart or foreclose competition in undesirable ways.

Policy implications ...

- Experience provides strong testimony that entrepreneurship and experimentation in the marketplace are the key drivers of innovation.
- This suggests that the primary focus of 5G regulation should be to enable innovative contractual approaches and market forces.
- At the same time, principles of openness and non-discrimination should be safeguarded, ideally with regulatory principles and instruments that use ex ante regulation with prudence
- Moreover, there is room for complementary policies to support innovations not pursued by for-profit actors.