Answer **one** question.

1. (a) Explain **two** forms of government intervention in markets. [10]

Def: public good
free-rider.

(b) Using real-world examples, discuss the view that governments should intervene if markets fail to provide public goods. [15]

positive

Q1B

A public good is a ~~non-e~~ good that is non-excludable and non-rivalrous, distinguishing itself from common access goods or ~~mer~~ private goods. It is usually provided by the government and includes goods such as public broadcasting, national defense and infrastructure. Because consumers enjoy public goods without paying, there is no price incentive and therefore, for-profit firms ~~do~~ are not inclined to produce the good by themselves.

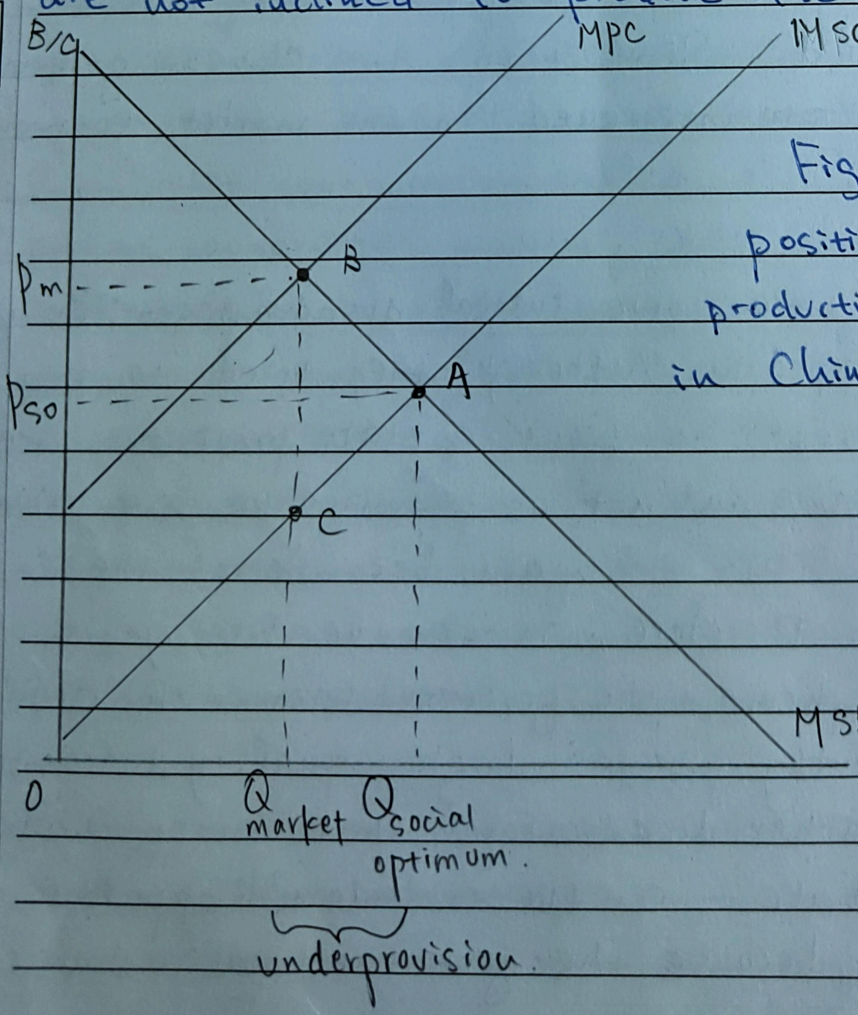

Fig 3:
positive externalities of production; road networks in China.

As figure 3 demonstrates, a public good is a type of positive externalities of production because ~~ex~~ it is a ~~underp~~ merit good underprovided by the free market. One ~~exam~~ real-world example of this is ~~a~~ China's road network market, where road networks are non-excludable and non-rivalrous. The analysis comences at point A, which represents the good being ~~at~~ social optimum if it was efficiently provided. However, because of the free-rider problem, in China during the 1980s, no road network was available from the lack of price incentives for firms. ~~Since the 1980s,~~ ~~It~~ This can be represented by MPC, where Quantity supplied is ~~les~~ significantly less than social optimum, resulting in potential welfare loss △ABC. In ~~the~~ the case of China, the ~~potent~~ PWL is all the external ~~bee~~ benefits society couldve enjoyed if ~~it~~ it was ~~eff~~ sufficiently produced. Since then, the Chinese goverment has significantly ~~ste~~ intervened in the market to provide the good.

On one side, they were some initial disadvantages ~~for~~ when the government stepped in. Although they tried to reach the quantity closest to Qso, ~~g~~ state provisions are often quite ineffective and not as organized as ~~pro~~ ~~privat~~ the private sector's This is ~~f~~ again, because of the lack of price incentives. Therefore, in ~~the~~ the first years of the road network scheme, the goverment intervention didn't succeed at sufficiently provide high-quality infrastructure to its citizens. Another disadvantage that arose - and still a point of debate - is the considerable opportunity ~~Ef~~ cost. Indeed, because the governement was in charge

to fully fund this project, it led to a considerable proportion of tax-revenues allocated toward this and thus, at the expense of other industries such as education and healthcare. This was initially an important disadvantage because providing quality education and healthcare was crucial in China during the 1980s.

However, although they were some initial disadvantages, many positive advantages arose from the project in the long-run. First, state provision of public goods is often acclaimed to be positive because it is equitable. Good All Chinese citizens had equal opportunities to access the road networks, regardless of price factors, such as income levels. This was effectively done through the contraction of the public sector. Secondly, a major success of the Chinese goverment during this intervention is that they gradually shifted its ownership to be part-private, part-public. Now, this road network is owned by a for-profit coorporation called the "China road and bridge cooporation" meaning that the government still owns it for a large part, while being perhaps more organized and effective because there exists some degree of price incentive. This has ultimatly resulted in China's road network to develop from no motorways in 1980s to currently be the world's first country in terms of length of road networks. At the same time, the quality of these networks have significantly improved in quality.

Having looked at both disadvantages in the short-run and advantages in the long-run, it can be said that governments should intervene if markets underprovide public goods. This is shown in this

~~Case of~~ ~~Chinese's~~ the Chinese road network's case study, and how overall economic activity and employment rose from the construction of these networks by the goverment while being affordable for all. Nevertheless, a key point for the success is ~~when~~ their decision to shift the strategy from state provision to a "quasi public good".

To ~~in~~ further improve on some of the disadvantages such as ~~important~~ high opportunity costs, they could higher their tax on ~~indire~~ indirct demerit goods. Finally, some potential issue to look ~~a~~ out for is potential issues of sustainability arising from infrastructure construction