

When you are doing something underground in the usual way, you have to defy gravity, because there is always a chance that something will fall on your head. When you are constructing a tunnel in soft soil, it can collapse; therefore, you have to provide support measures, which cost a lot of money.



*tunnel*

But if you are constructing a tunnel in hard rock, you have a different problem. You have to use explosives to excavate hard rock, which causes crack and fault zones above you. Therefore, you have to provide support (or better said, safe measures) in this situation, too.



*shaft excavation*

In tunnels, the main threat comes from tunnel boundaries, but when you excavate the shaft from the surface, you have to elevate the excavated



*well*

material. Even a small rock, falling from a higher level, can do a lot of damage. Safety measures define the speed and price of construction in this case.