

# **Before a Fall: Impacts of Earthquake Regulation and Building Codes on the Commercial Building Market**

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**For the full paper, please see:**

[http://motu-www.motu.org.nz/wpapers/15\\_19.pdf](http://motu-www.motu.org.nz/wpapers/15_19.pdf)

## **Abstract**

We test whether a major earthquake in one city (Christchurch, New Zealand) affects the prices of earthquake-prone commercial buildings in a city (Wellington) that was unaffected by the disaster. In particular, we test whether the official public declaration of a building as being earthquake-prone (with a corresponding requirement to remediate the building to minimum earthquake code requirements) has an effect on price over and above that experienced by similarly earthquake-prone (but not yet declared) buildings. We distinguish the latter by isolating sales of those buildings that are subsequently declared to be earthquake-prone. We find that in the CBD, the price discount that accompanies an official earthquake-prone declaration averages 45% whereas there is no observable discount on buildings that are subsequently declared earthquake-prone. Consistent with our theoretical model that anticipates forced sale of some officially declared earthquake-prone buildings, the probability of sale of officially declared earthquake-prone buildings rose markedly after the Christchurch earthquakes. Our results therefore show that officially declared earthquake-prone status has a considerable impact on the commercial property market that is separate from the effects of being earthquake-prone but where the building has not (yet) officially received that status.