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## Initiating A Crisis Situation on Demand – Investing in The Technical and Protective Zone of The Southern Baltic Coast\*

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## **Summary**

The article is an attempt to show the problems of contemporary investments located in the technical and protective belt on the Polish South Baltic coast. Pointing out the initiation of a crisis situation through the prism of building in areas associated with a high risk from the sea should stimulate the imagination of potential decision-makers and investors about the probability of crisis situations that may appear unexpectedly.

The problem of investing in coastal areas is not a new topic, but building in the technical and protective belt zone of the South Baltic is, and not only due to the problems of the modern world related to climate warming, but mainly to the constantly rising sea level. This topic became the inspiration to check and verify the possibility of a crisis in this area.

The article, based on the collected archival data of the Maritime Institute in Gdańsk, presents a simulation of erosion-accumulation changes in selected areas of the Polish South Baltic coast. The presented characteristics of the coastal real estate market are focused on the impact of sea erosion and land development in the long-term process, i.e. until 2110. Therefore, it is a forecasting tool with elements of situational prediction of specific research areas.

GIS technology (spatial information system) was used to illustrate the research results, used to capture, store, check and display spatial data, in this case to show areas at potential risk through the use of simulation elements, using spatial interpolation tools on the V-map level-2 map base. The applied spatial interpolation tools - inverse weighted distances provided the basis for drawing conclusions regarding construction in erosion areas in the assumed time perspective.

The thesis is focused on the expected initiation of a crisis situation under the influence of storm floods and the constantly increasing destructive power of sea erosion resulting from the rise in sea level associated with climate change on Earth. The most important motion to stop construction in the technical zone, which is currently being degraded, was also revealed. It was pointed out that further construction in coastal areas is an element of an ever-growing crisis bubble, which, if burst, could lead to irreversible consequences for the community living there.

**Keywords:** real estate market, crisis situation, technical and protective zone.