Helioseismology observations from GONG and SOHO/MDI in 1996-2008 provided almost uninterrupted data for the whole Solar Cycle 23, which allow us to investigate variations of the structure and rotation in the solar interior and compare these with dynamo models. The basic properties and even the depth of the dynamo process are still unknown. Most dynamo models assume that the toroidal magnetic field, that forms sunspots, is generated in the tachocline, near the bottom of the convection zone. However, there are significant theoretical and observational problems with such deep-seated dynamo models. Recent dynamo calculations, based on the mean-field MHD theory, suggest a new paradigm, in which the dynamo process is distributed in the bulk of the convection zone and shaped in a near-surface layer. In this model, the dynamo wave propagates along the isosurfaces of angular velocity in the subsurface shear layer and forms the butterfly diagram according to the Yoshimura rule and in agreement with solar-cycle observations. We compare this and also deep-seated dynamo models with the inferences of variations of the interior structure and differential rotation from the SOHO/MDI and GONG helioseismology data, and also with observations of surface magnetic field and flows.