Official gold reserves in Brazil totaled 2,240 t Au in 2011, and official production from 1988 to 2011 was about 1,612 t, which corresponds to ca. 2.3% of the global production, and historical production (1700-2000) is estimated to be ca. 3,000 t Au. However, company reports show that ore reserves (measured plus indicated) plus past production exceed 3,150 t Au only for orogenic gold deposits. These occur in Archean to Neoproterozoic terranes of variable tectonic settings, which are included in cratons and mobile belts. The distribution of known reserves is similar to what is observed globally, with peaks of distribution in Neoarchean, Rhyacian, and Tonian/Cryogenian times. Accordingly, the most endowed terranes are (1) the Neoarchean greenstone belts of the Iron Quadrangle of the São Francisco Craton that are responsible for more than one third of the reserves-production (includes the giant Morro Velho deposit); (2) Rhyacian greenstone belts, arc-related metavolcano-sedimentary sequences and associated calc-alkaline batholiths of the Amazonian (State of Amapá), São Francisco (Rio Itapicuru), and São Luís cratons; remnants of these sequences occur as basement and/or reworked units within Neoproterozoic (Brasiliano-Pan-African) mobile belts (e.g., Gurupi Belt, Borborema Province), and respond for almost one third of the reserves-production; (3) Tonian/Cryogenian schist belts rich in carbonaceous matter of the Aguapeí and Brasília belts (ca. 25% of the reserves-production), that include the giant Rio Paracatu deposit and are interpreted as inverted passive margins with diagenetic pyrite and organic matter deposited in deep reduced waters. Most of the deposits formed under greenschist facies conditions and from processes and fluid systems similar to those of classic orogenic gold systems worldwide. Archean and Rhyacian deposits are associated with juvenile, accretionary orogens that formed the Kenorland and Columbia supercontinents, whereas Neoproterozoic deposits are associated with terranes that were accreted to the margins of the major Amazonian and São Francisco cratons during the assembly of West-Gondwana. Only the Iron Quadrangle Province, which is exploited since colonial times, might be considered as mature, or well-developed in terms of exploration. Therefore, the potential for discovery of important gold deposits in other provinces is still promising.